Funding and organization of health services and social services

HEALTH IN QUÉBEC:

a few

indicators

Québec
Ministère de
la Santé et des
Services sociaux

103-02833/

HEALTH IN QUÉBEC:
a few
indicators

june 2000

Québec
Ministère de
la Santé et des
Services sociaux

Produced by :
The Direction des communications of the ministère de la Santé et des Services sociaux

Send your order by fax to : **(418) 644-4574**

Or by e-mail to : **communications@msss.gouv.qc.ca**

Or by mail to : **Ministère de la Santé et des Services sociaux**
Direction des communications
1075, chemin Sainte-Foy, 16e étage
Québec (Québec)
G1S 2M1

This document may be consulted in the **documentation section of** the ministère de la Santé et des Services sociaux Web site at **www.msss.gouv.qc.ca**

Legal deposit
Bibliothèque nationale du Québec, 2000
Bibliothèque nationale du Canada, 2000
ISBN 2-550-36252-7

© Gouvernement du Québec

Reproduction of this document in whole or in part is authorized, as long as the source is mentioned.

Table of contents

CHALLENGES FOR THE HEALTH CARE SYSTEM: THE DEMOGRAPHIC CONTEXT AND CHANGING PORTRAIT OF HEALTH 1

THE DEMOGRAPHIC SITUATION 2

POPULATION DEVELOPMENT 2

Intensification of population aging 2

Reduction in the number and demographic load of young people 3

The proportion of young persons and seniors varies according to region 3

FERTILITY 5

The fertility of Québec women is still declining 5

The main effect of the low fertility rate of women is that it limits population renewal. 7

PERCEIVED HEALTH STATUS 8

NINE OUT OF TEN QUEBECKERS RATE THEIR HEALTH AS GOOD OR EXCELLENT 8

THREE OUT OF FOUR SENIORS RATE THEIR HEALTH AS GOOD OR EXCELLENT 8

PERSONS IN THE LOWEST INCOME GROUPS ARE MORE LIKELY TO DESCRIBE THEIR HEALTH AS AVERAGE OR POOR 8

PROPORTIONATELY MORE QUEBECKERS DESCRIBE THEIR HEALTH STATUS AS EXCELLENT 9

HEALTH PROBLEMS RESPONSIBLE FOR HOSPITALIZATIONS AND ACTIVITY LIMITATIONS OF QUEBECKERS 11

DISABILITY DAYS 11

The total number of disability days increases with age 11

Quebeckers in the lowest income bracket have twice as many disability days as those in the highest income bracket. 12

Nine percent of Quebeckers have an activity limitation due to a health reason 13

Twenty-seven percent of persons aged 75 and over have an activity limitation 13

SHORT-TERM HOSPITALIZATION 15

For men aged 15 to 44, more than a third of hospital days are linked to mental health disorders 15

One out of four hospital days involves a person aged 75 and over and the figure is approximately the same for adults aged 45 to 64. 15

LIFE EXPECTANCY 19

Women have greater life expectancy than men 19

The most disadvantaged Quebeckers live an average of six years less than the more advantaged Quebeckers 20

There are great regional differences in life expectancy 20

Québec men have one of the shortest life expectancies in Canada 22

INFANT MORTALITY **24**

Infant mortality has declined dramatically in recent years *24*

The infant mortality rate is still higher in disadvantaged environments than advantaged environments despite of a significant narrowing of gaps *25*

Québec's infant mortality rate is now comparable to that of Ontario, reflecting the considerable efforts made in the field of perinatality in Québec since the 1970s *26*

Québec's infant mortality rate is still higher than that of several industrialized countries *27*

CHANGES IN MORTALITY **28**

A 29% decline in mortality rate over the last two decades *28*

Men and women are affected by the same causes of death *31*

The rate of potential years of life lost is two times higher for men than for women *31*

Young adults die mainly as a result of injuries and poisoning while more seniors die as a result of chronic diseases *32*

Great regional differences in mortality rates still exist in Québec despite the spectacular decline over the last decades *34*

The second highest mortality rate for men after Newfoundland: more men die prematurely in Québec *35*

Quebeckers have a relatively low mortality rate as compared with several industrialized countries *36*

PRINCIPAL HEALTH PROBLEMS OF QUEBECKERS **39**

Arthritis, rheumatism and hypertension are the most common chronic diseases *39*

Increase in diabetes, arthritis, asthma and other chronic diseases since 1987 ..... *39*

AIDS 40

ALZHEIMER'S 41

DIABETES 41

CARDIOVASCULAR DISEASE 42

Cardiovascular disease is the major cause of death *42*

The rate of cardiovascular disease mortality has declined by half over the last twenty years *42*

Cardiovascular disease mortality: although the gaps have been narrowing over the last ten years, there are still great variations according to income *44*

Québec women have the same cardiovascular disease mortality rate as other Canadian *45*

Québec has one of the lowest rates of cardiovascular disease mortality among all industrialized countries *46*

Québec men and women die prematurely from cardiovascular disease *47*

CANCER 49

The number of new cases of cancer has been growing steadily, a reflection of population growth and aging *49*

The many forms of cancer entail more than 600,000 hospital days per year, a third of which involve adults aged 45 to 64 ..... *49*

Lung cancer now kills more women than breast cancer *49*

Increase in death rate for lung cancer but decline for other forms of cancer *50*

Lung cancer mortality rates are higher among low-income Quebeckers *51*

Proportionately more men in Québec die prematurely from cancer than elsewhere in Canada 52

Québec's performance in terms of cancer mortality is poor compared to other industrialized countries 53

Québec women have experienced the highest increase in lung cancer mortality among all industrialized countries 54

RESPIRATORY DISEASE 56

Overall decline in respiratory disease mortality and increase in mortality from bronchitis and emphysema 56

Substantial excess mortality in the Northern Québec regions 56

People with low income have mortality rates for diseases of the respiratory system that are distinctly higher than those of the rest of the population 57

Québec and Nova Scotia have the highest mortality rates for respiratory diseases 58

In all industrialized countries, the rate of male respiratory disease mortality is two times higher than that of women 59

INJURIES AND POISONINGS 61

The majority of deaths due to injuries and poisonings occur before age 50 61

Poisonings and injuries entail more than 380,000 hospital days per year 61

Mortality from motor vehicle accidents has decreased by half while mortality from suicide has increased by just as much 61

For all injuries and poisonings, mortality rates in Québec are higher than the average observed elsewhere in Canada 63

Québec has one of the highest suicide rates among industrialized countries 67

SELECTED DETERMINANTS OF HEALTH 69

THE ENVIRONMENT AND LIVING CONDITIONS 69

LIFESTYLE 69

Physical Activity 69

Excess Weight 70

Alcohol Consumption 72

Tobacco Use 73

HEALTH SERVICES AS A HEALTH DETERMINANT 76

ISSUES RELATED TO HEALTH AND THE HEALTH CARE SYSTEM IN THE 21ST CENTURY ... 78

SOLUTIONS TO ADDRESS THESE ISSUES 78

Challenges for the Health Care System: the Demographic Context and Changing Portrait of Health

A portrait of health in Québec is an essential tool for understanding the strengths and weaknesses of our health care system. It also helps identify some of the challenges faced in order to improve the health status of the population and reduce the differences in health between the groups therein.

This report is intended above all to reflect the general trends and issues of the health care system, and does not address the social problems that have an impact on health nor the health problems that particularly affect children and young people. These problems should be examined in future reports on health.

One of the major findings of this report is that **population aging** is a major challenge facing the health care system. This provides the incentive for re-examining the way in which diseases associated with aging are dealt with (for example, cardiovascular diseases, respiratory diseases and infections, cancer and arthritis, Alzheimer's disease). These are often chronic diseases that put intense pressure on the health care system. The need to reduce these pressures, which are associated with a significant aging of the population, also points to the urgent need to establish measures aimed at helping seniors to age in good health and supporting the persons who help them.

Another finding is that, despite quite a positive assessment, significant **differences in health status** still exist in Québec, for example:

- between men and women, particularly excess male mortality associated with diseases caused by smoking (e.g., cardiovascular and respiratory diseases, lung cancer), life-style, suicide and accidents;

- between groups from advantaged and disadvantaged environments, despite zero fee, universal health care services for all health problems.

Of course, to reduce these differences, action must be taken to improve real access to services for people who are ill. But even more importantly, if it is recognized that health is highly conditioned by the physical, social and economic environment in which people live, action must be taken as close as possible to the source of problems, so as to promote the conditions and lifestyles that foster health.

These approaches will only be effective if activities are carried out in collaboration with other activity sectors since their decisions and resulting programs have an impact on the health of the population.

It is also crucial that health promotion activities reach individuals and families as early as possible in people's lives since the lack of equal opportunity for healthy growing and aging goes back to the first few years of life.

A third major challenge to emerge is the necessity to better address the needs of a growing number of persons who are living with a disability, often related to a mental health, cardiac or joint disease. The aim here is to **add life and health to years, to reduce suffering** and periods of disability, and to improve access to transportation, recreation and the living conditions that that will allow people with a disability to live well.

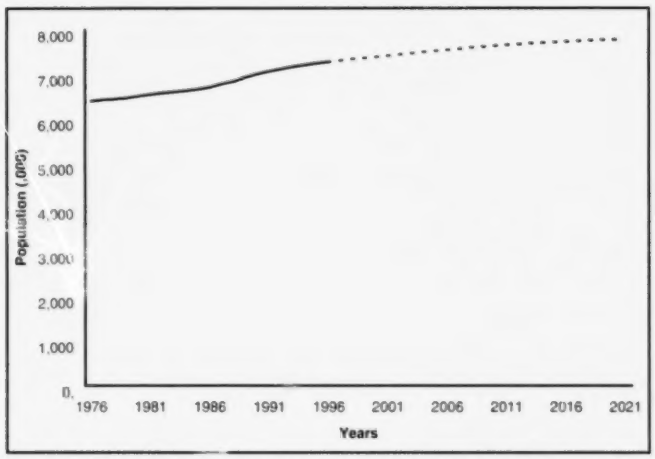
The Demographic Situation

Several changes in the social landscape are having an impact on health. The demographic situation is a significant aspect of these changes. The demographic characteristics of a population greatly influence health, including fertility, utilization of services, mortality rates, limitation of activities and chronic diseases. By analyzing population development and putting it in a wider context help to better interpret the data on the health status of Quebeckers and its implications for the organization of health care and for health promotion and disease prevention activities.

Population Development

At the last census in 1996, the population of Québec was 7,274,019. According to demographic projections, the population of Québec will reach 7,782,416 in 2021. This low expected increase of a half-million in 25 years will result from a 46% increase in persons aged 65 and over and a 3.5% increase in the number of adults, combined with a 28% decrease in the number of young people under the age of 20.

Québec's Population Development, 1976-2021



Source: Statistics Canada and projections by the Bureau de la statistique du Québec.

Intensification of population aging

For several years, the proportion of persons aged 65 and over in the total population has been growing rapidly. In 1976 and in 1996 persons aged 65 and over represented 8% of the entire population. This proportion increased to 12% in 1996, and projections reveal that it will reach 21%, or one in five persons, by 2021. This means that over a period of nearly forty years, the population aged 65 and over will have increased by 163%, that is, twice as fast as in all industrialized countries.

Population Distribution on July 1st by Age, Québec, 1976-2021 (as a percentage)

	Under 20	20-64 years old	65 and over
	%	%	%
1976	35	57	8
1981	31	60	9
1986	27	63	10
1991	26	63	11
1996	26	62	12
2001	24	63	13
2006	23	63	14
2011	21	63	16
2016	20	62	19
2021	19	59	21

Source: Statistics Canada and projections by the Bureau de la statistique du Québec.
Sources : 1976-1991: Statistics Canada, population estimates.
1996-2021: Institut de la statistique du Québec, reference case, regional prospects for population changes, 1996-2041.

Reduction in the number and demographic load of young people

While the population of seniors is steadily increasing, the proportion of persons under the age of 20 has decreased significantly and continuously during the same period. Young persons under 20 represented 35% of the population in 1976 and it is expected that they will represent only 19% of the total population in 2021. The population aged 20-64 has fluctuated little during the last twenty years and population projections suggest that, compared to other age groups, it will remain relatively stable for many years to come.

The proportion of young persons and seniors varies according to region

The population distribution of Québec varies greatly according to health and social service region. First of all, of all the regions in Québec, the Montréal region has the lowest proportion of young persons (22% in 1996). Conversely, in Northern Québec, which includes health and social service regions 10, 17 and 18, young persons under 20 represented 40% of the total population in 1996. Generally speaking, the demographic load of young persons in the total population is higher in regions located in the north, which have avoided rapid population aging, owing particularly to a higher than average fertility rate.

In contrast, the demographic load of seniors is highest in Montréal-Centre (15%). In the Northern Québec regions, in 1996, persons aged 65 and over represented only 3% of the total population. Thus, there are significant demographic variations between Québec's regions. However, it should not be forgotten that the total demographic load also varies greatly from region to region.

Percentage Population Distribution by Age, Québec and Health and Social Service Regions, 1996 and 2021

	Under 20			20-64 years old			65 and over		
	1996	2021	% Variation	1996	2021	% Variation	1996	2021	% Variation
Lower St. Laurence	26	17	-37	59	57	-5	14	27	+ 90
Saguenay—Lac-Saint-Jean	29	19	-40	61	58	-4	10	24	+ 125
Québec	23	17	-26	64	59	-8	13	24	+ 95
Mauricie and Centre of Québec	26	18	-31	60	57	-5	14	25	+ 82
Estrie	27	19	-29	60	58	-4	13	23	+ 75
Montréal	22	20	-9	63	61	-4	15	20	+ 34
Outaouais	27	20	-30	64	61	-4	9	19	+ 115
Abitibi-Témiscaminque	30	20	-37	60	59	-3	10	21	+ 116
North Shore	29	19	-37	64	61	-4	7	20	+ 166
Northern Québec	40	34	-24	57	58	2	3	8	+ 153
Gaspé—Magdalen Islands	26	15	-42	61	58	-6	13	28	+ 112
Chaudière-Appalaches	28	19	-33	60	58	-4	12	23	+ 91
Laval	26	19	-25	63	59	-6	11	22	+ 93
Lanaudière	29	21	-32	62	59	-3	9	20	+ 113
Laurentians	28	21	-29	62	60	-3	10	19	+ 98
Montérégie	28	19	-32	62	59	-5	10	21	+ 110
All of Québec	26	19	-26	62	59	-5	12	21	+ 79

Note: Population on July 1st. Region 10 (Northern Quebec) includes health and social service regions 10, 17 and 18.

Source: Institut de la statistique du Québec, reference case, regional prospects for population changes, 1996-2041.

According to population projections for 1976-2021, the development of population distribution will vary according to region. Some regions will experience an exodus of young persons and young families, resulting in a decrease of almost 40% of their population under the age of 20 while other regions will experience a less dramatic decrease. In Montréal-Centre, this population will decrease by only 9%, particularly due to international immigration and migratory movements, which tend to slow down population aging. Taken as a whole, the proportion of young persons under the age of 20 in Québec's total population will decrease by 26%.

Conversely, the proportion of population aged 65 and over will increase by almost 79% between 1996 and 2021. However, for the majority of Québec regions, the increase in the relative load of seniors in the total population will be higher than 79% because the elderly population of Montréal-Centre will increase by only 34% during this period. Montréal-Centre is the most populated Québec region, which explains why the increase is only 79% even though all the regions have distinctly higher variations. Overall, as the table shows, the variations in population distribution from 1996 to 2021 will be very high in all Québec regions except Montréal-Centre. The latter region will experience slight variations as compared to the other regions, whose variations will be as much as three times higher.

However, it should not be forgotten that the population of Montréal-Centre is already older than the whole Québec population.

Fertility

The fertility of Québec women is still declining

Since 1976, the fertility trend of Québec women has been quite irregular. Between 1976 and 1987, the fertility rate fell steadily, from 1.74 to 1.37 children per woman. This indicator then began to rise, reaching an average of 1.67 children per woman in 1992. Then fertility began to decline again. In 1998, the average number of children per woman was 1.48. The fertility rate in rural areas is higher than in urban areas.

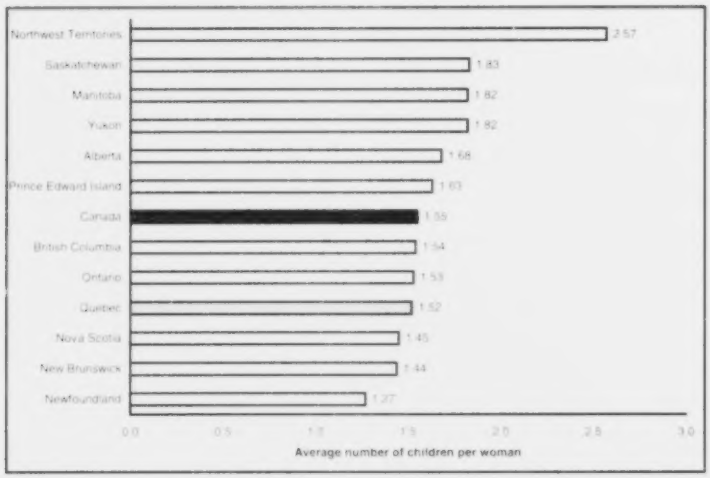
Total Fertility Rate
Québec, 1976-1998 (average number of children per woman)

Years	Average number of children per woman
1976	1.74
1977	1.69
1978	1.66
1979	1.70
1980	1.63
1981	1.57
1982	1.48
1983	1.43
1984	1.42
1985	1.39
1986	1.37
1987	1.36
1988	1.42
1989	1.51
1990	1.63
1991	1.65
1992	1.67
1993	1.63
1994	1.63
1995	1.61
1996	1.60
1997	1.53
1998	1.48

Source: Institut de la Statistique du Québec

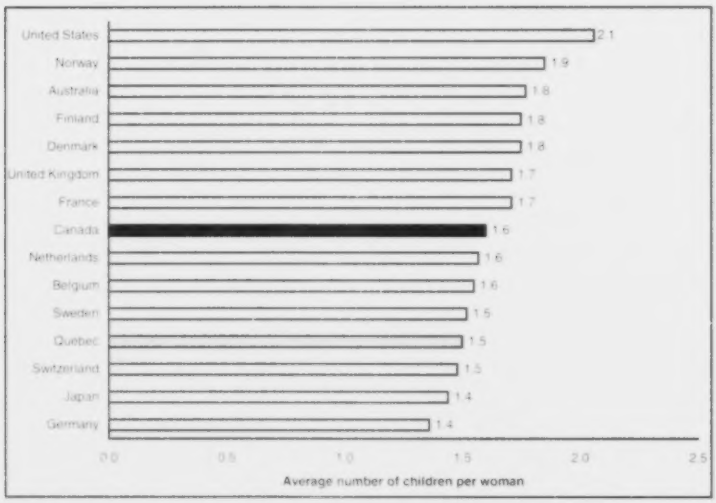
The total fertility rate of Québec women is very similar to that of Ontario women and Canadian women in general. However, the average number of children per woman in Québec is lower than that of all the provinces west of Québec.

Total Fertility Rate by Canadian Province, 1997
(average number of children per woman)



Source: Statistics Canada, Health Statistics Division,
Health Status and Marital Status Section and Demography Division.

Total Fertility Rate,
by Selected Industrialized Countries, 1997 (average number of children per woman)



Source: A. Monnier "La conjoncture demographique: l'Europe et les pays développés d'outre-mer," *Population*, 5, 1998, pp. 995-1024.
Direction générale de la santé publique, Surveillance de la mortalité au Québec, 1976-1997.

In addition, the average number of children per woman in Québec is one of the lowest among industrialized countries.

The main effect of the low fertility rate of women is that it limits population renewal.

Current population projections are based on hypotheses about women's fertility, mortality projections and hypotheses about international migration. The main effect of the low fertility rate of Québec women is that it limits population renewal because it is not high enough to ensure natural population growth.

Implications

By 2021, the number of young Quebeckers will have dropped significantly. This will affect each Québec region differently. Conversely, the number and proportion of persons aged 65 and over will have increased dramatically in all regions. Over the next ten years, population aging will accelerate and be more striking in regions in which the population is declining. Population aging started in Montréal well before it did in other regions. This region is older than the others in terms of age structure, which puts considerable strain on services and the needs to adjust front-line services. On the other hand, in the coming years, population aging in Montréal-Centre, countered in part by immigration, will be less considerable than in the other regions, whose services will have to be adjusted rapidly to this new situation.

Thus, the declining number of young persons and sharply increasing number of seniors accelerate population aging. The population of seniors in Québec will double within the next twenty-five years, which is a very fast rate. According to United Nations projections, this is the fastest rate among industrialized countries.

This major and rapid change to the age pyramid has a profound effect on needs for services, which will be directed less towards young persons and increasingly towards seniors. It will make measures from the pre-natal period onwards even more essential so that all children are born and grow up in good health and develop their full capacity to become productive adults.

Also, it will be essential to establish measures, services and interventions to promote healthy aging, thus alleviating the increased pressure on service needs. In addition, this demographic change and the context of a service network that is increasingly centered on ambulatory and community care will make it even more crucial to support natural care givers.

In terms of the consequences for health and the health care and services system, the services network in Montréal-Centre is already feeling the effects of population aging. The other regions will soon be affected by this phenomenon, with the exception of Nunavik where the high rate of early death is reducing the proportion of seniors.

In addition, these profound demographic changes constitute a challenge for families, which will have fewer children, more seniors to support and fewer working-age family members. The capacity of individuals and communities to adjust will likely be put to the test, as will their health. It is therefore particularly important for Québec society to provide for measures to support the capacity of families, communities and more vulnerable persons so that they will be able to adjust effectively to these changes and contribute to the development of their environment, and so that additional pressures on health and social services can be avoided.

Perceived Health Status

Nine out of ten Quebeckers rate their health as good or excellent

Self-rated health status has been shown to be a reliable predictor of health problems because it is correlated with physical health problems, limitation of activities and, to a lesser degree, with mental health status. There is also a correlation between this indicator and life styles or behaviours related to health (smoking, lack of exercise and weight gain). In 1998, the vast majority of Quebeckers (89%) described their health as good to excellent and one in five persons described it as excellent.

Three out of four seniors rate their health as good or excellent

Even though the proportion of persons who describe their health status as good or excellent decreases with age, the majority of seniors rate their health as good. Three out of four (77%) persons aged 65 and over describe their health, as compared to other persons their age, as good, very good or excellent. However, compared to the population as a whole, twice as many seniors (23% vs. 11%) rated their health as average or poor.

Self-rated Health,
Age 15+, Québec, 1998

	Self-rated health				
Sex/Age group	**Excellent**	**Very good**	**Good**	**Average**	**Poor**
Men	%	%	%	%	%
15-24	24.2	42.5	27.2	5.5	0.6
25-44	21.4	38.6	33.2	6.1	0.8
45-64	17.8	35.2	34.5	9.7	2.9
65 +	12.1	24.0	41.6	17.1	5.2
Total	19.6	36.4	33.6	8.1	2.0
Women					
15-24	17.8	41.0	33.6	6.7	0.9
25-44	19.1	39.5	34.2	6.1	1.1
45-64	16.0	35.0	35.6	9.9	3.4
65 +	10.6	24.6	41.6	19.5	3.4
Total	16.6	36.0	35.7	9.5	2.2
Both sexes					
15-24	21.1	18.9	30.4	6.1	0.7
25-44	20.2	39.0	33.7	6.1	1.0
45-64	16.9	35.1	35.0	9.8	3.2
65 +	11.2	24.3	41.6	18.5	4.4
Total	18.1	36.2	34.7	9.0	2.1

Source: Québec Health and Social Survey, 1998.

Persons in the lowest income groups are more likely to describe their health as average or poor

Persons with a lower level of education or with the lowest incomes are more likely to rate their health as average or poor. Furthermore, one third of unemployed persons describe their health as poor or average.

Although on average perceived health status has not varied significantly since 1987, a larger proportion of young people aged 15-24 (4.4 - 6.8%) describe their health as average or poor as compared with 1987.

Self-rated Health by Selected Socio-economic Characteristics, Age 15+, Québec, 1998

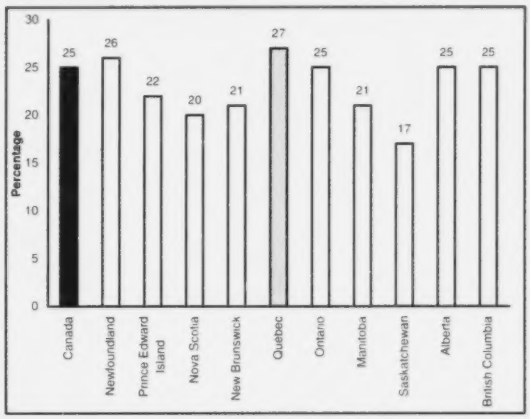
	Self-rated health			
	Excellent	Very good	Good	Average or Poor
Relative educational level				
Lower	15.1	29.0	38.4	17.6
Low	16.6	33.9	37.0	12.5
Average	16.6	38.9	35.7	8.8
High	18.7	37.7	33.7	9.9
Higher	22.8	39.8	29.7	7.7
Income level				
Very low	17.0	27.1	33.0	22.9
Low	15.4	29.3	36.1	19.2
Low/average	16.4	34.7	37.1	11.9
Average/High	18.8	39.3	34.6	7.2
High	23.6	42.2	27.6	6.6
Activity status				
Employed	20.9	40.1	33.8	5.3
Student	21.4	39.9	31.2	7.5
Homemaker	13.4	32.5	39.0	15.1
Retired	12.0	26.4	38.3	23.4
Unemployed	11.5	24.4	30.8	33.3

Source: Quebec Health and Social Survey 1998.

Proportionately more Quebeckers describe their health status as excellent

There are substantial provincial differences in perceived health status. Using the measure of self-rated health, compared to the other provinces, a proportionately higher number of Quebeckers (27%) view their health as excellent. A smaller proportion of Saskatchewan residents (17%) see their health as excellent.

Health Status Perceived as Excellent, Age 12+, by Province, 1996-1997



Source: National Population Health Survey, 1996-1997

Implications

Self-rated health is a useful indicator of the services to be provided to different population groups. For individuals who are in good or excellent health, the priority is to support their capacity for healthy growing and aging, with the least factors of vulnerability or risk to their health, and to provide them early, accessible and high-quality diagnostic and treatment services when necessary.

However, for the far fewer number of individuals who are in average or poor health or who have one or more health problems, the objective of the health care system is to provide a cure or effective care so that they can quickly regain optimum health. A major part of the activities of the health care system is intended for this group, which represents approximately 11% of the population. A more preventive approach to the management of health and social services supply, aimed at keeping the largest proportion of the population in good health for as long as possible, would decrease the pressure on the health care system due to population aging, and increase the quality of life of individuals and their families.

Health Problems Responsible for Hospitalizations and Activity Limitations of Quebeckers

Disability Days

Disability days are defined as the average number of days related to losses of functional autonomy due to health reasons, whether short or long term. The annual average applies only to the population as a whole.

The total number of disability days increases with age

In 1998, the annual average number of disability days per person was estimated to be fifteen days. The total number of disability days varies considerably by age. It doubles between the 15-24 and 25-44 age groups, and doubles again between the 25-44 and 65-74 age groups.

Annual Average Disability Days per Person by Sex and Age, Population in Private Households, Québec, 1998

Age group	Men	Women	Total
		Days	
Total	14.7	19.0	16.9
0-14	7.9	7.5	7.7
15-24	6.7	9.3	7.9
25-44	14.3	19.9	17.1
45-64	18.9	23.5	21.3
65-74	29.0	26.9	27.9
75 and over	34.5	45.0	41.3

Source: Québec Health and Social Survey 1998.

Based on the 1998 Québec Health and Social Survey, it is estimated that more than half of all disability days involve people who experience a long-term activity limitation. This is true of both men and women (55%). The highest number of disability days (18% and 17%) are due to joint diseases and respiratory disease. The proportion of disability days resulting from an accident or injury is 10% for the general population, but 15% for men, or twice as high as for women (7%).

Duration, Origin and Cause of Disability Days During Two Weeks Preceding the Survey, by Age, Population in Private Households, Québec, 1998

Category	Men	Women	Total
		%	
Total	100.0	100.0	100.0
Duration			
Long term (1)	54.0	55.0	54.4
Short term (2)	46.0	45.0	45.6
Origin			
External	22.6	10.1	15.5
Other	77.4	89.9	84.5
Cause			
Joint	16.4	19.3	18.1
Respiratory	16.5	18.1	17.4
Accidental	15.1	6.9	10.4
Mental health	D7.0	8.3	7.8
Cardiovascular	D8.6	D5.6	6.9
Other	36.4	41.7	39.4

(1) Disability days among persons with an activity limitation.
(2) Disability days among persons without an activity limitation.

Source: Québec Health and Social Survey 1998.

Quebeckers in the lowest income bracket have twice as many disability days as those in the highest income bracket.

The number of disability days is strongly linked with the socio-economic characteristics of individuals. The annual average number of disability days for persons in the highest income groups is half the number for those in the lowest income groups. Very poor Quebeckers have an average of 29 disability days per year, or twice as many as the richest Quebeckers, who have an average of only 12 disability days per year. It is interesting to note that the employed and students have a lower number of disability days than other persons.

Annual Average Disability Days per Person by Type and Selected Socio-economic Characteristics, Both Sexes, Population in Private Households, Québec, 1998

Characteristics	Severe (1)	Moderate (2)	Light (3)	Total
		Days		
Income level				
Lowest	6.4	10.4	12.6	29.4
Low	5.7	9.4	8.1	23.2
Low/ average	3.5	6.9	6.6	17.0
Average/ high	2.4	5.9	4.9	13.2
Highest	2.1	5.5	4.1	11.7
Normal activity status (aged 15+)				
Student	2.1	2.4	3.7	8.2
Employed	1.9	5.5	4.1	11.6
Homemaker	4.0	6.8	12.6	23.4
Unemployed	12.5	42.8	17.3	72.6
Retired	7.2	12.4	12.0	31.6

(1) Confined to bed or chair all day or almost all day.
(2) Unable to work, keep house or attend school.
(3) Have had to cut down on activities.

Source: Québec Health and Social Survey 1998.

Nine percent of Quebeckers have an activity limitation due to a health reason

Another measure of Quebeckers' disabilities is the degree of limitation of activities due to a health problem or a chronic physical or mental illness. An activity limitation measures the degree to which an individual is limited in performing the type and quantity of activities due to a health problem. Based on data from the Health and Social Survey, it is estimated that, at the time of the survey, 9.3% of Quebeckers in all age groups had activity limitations due to health reasons. This proportion was 27% for persons over age 75. The primary causes for activity limitations are, in decreasing order of importance: joint disease (27%), cardiovascular disease (14%), respiratory disease (11%), injuries (8%) and mental health problems (8%). The relative importance of joint and respiratory diseases as well as mental health problems has increased since the 1987 survey.

Twenty-seven percent of persons aged 75 and over have an activity limitation

Seven percent (7%) of non-institutionalized Quebeckers reported an activity limitation in 1987 and in 1992-1993. In 1998, this proportion had increased to 9%. However, the increase is not statistically significant. Among persons aged 65 and over, 20% reported having an activity limitation and among those aged 75 and over, the proportion was 27%.

Furthermore, the proportion of activity limitations caused by a mental health problem increased to 8% during the six-year interval between the last two surveys. This reflects efforts to keep people in their community and the increase in the prevalence of Alzheimer's disease among seniors.

Changes in the Rates of Activity Limitation, by Sex and Age, Population in Private Households, Québec, 1987, 1992-1993 and 1998

Sex/age	1987	1992-1993	1998
		%	
Total	7.4	7.2	9.3
Sex			
Men	7.1	6.4	8.2
Women	7.6	8.0	10.4
Age			
0-14	3.1	2.2	2.3
15-24	3.1	3.6	4.0
25-44	5.3	6.1	7.4
45-64	13.4	10.2	14.0
65-74	16.8	17.2	20.3
75 and over	21.7	22.7	26.7

Sources : Québec Health Survey 1987.
Québec Health and Social Survey 1992-1993.
Québec Health and Social Survey 1998.

Causes and Origin of Activity Limitations, Population in Private Households, Québec, 1987, 1992-1993 and 1998

Cause/origin	1987	1992-1993	1998
		%	
Total	100.0	100.0	100.0
Cause			
Joint	24.0	26.5	26.8
Cardiovascular	15.9	13.1	13.7
Respiratory	7.6	12.9	10.7
Mental health	5.6	6.0	8.3
Accident	10.3	7.3	8.2
Other	36.6	34.2	32.3
Origin			
External	20.5	18.7	18.3
Other	79.5	81.3	81.6

Sources: Québec Health Survey 1987.
Québec Health and Social Survey 1992-1993.
Québec Health and Social Survey 1998.

Short-term hospitalization

Hospitalizations also provide a reliable indicator of the health problems that affect Quebeckers and cause certain activity limitations. They are also an indicator of the volume of care provided, excluding ambulatory and long-term care.

Overall, cardiovascular disease is the cause of the highest number of hospital days (19%), followed mainly by mental health disorders (12%), cancer (12%) and diseases of the respiratory system (9 %). However, the situation changes significantly when the distribution is analyzed according to sex and age. For both boys and girls, disease of the respiratory system is the leading cause of hospitalization among children under the age of 14, accounting for 20% of total hospital days. Injuries are the second leading cause of hospitalization for this age group.

For men aged 15 to 44, more than a third of hospital days are linked to mental health disorders

Among young men aged 15 to 24, mental health disorders are the cause of 41.3% of hospital days. In contrast, childbirth and pregnancy complications are the cause of 44% of hospital days among young women. Injuries are also responsible for a large proportion of hospital days in this group: 19.8% for young men and 5.1% for young women.

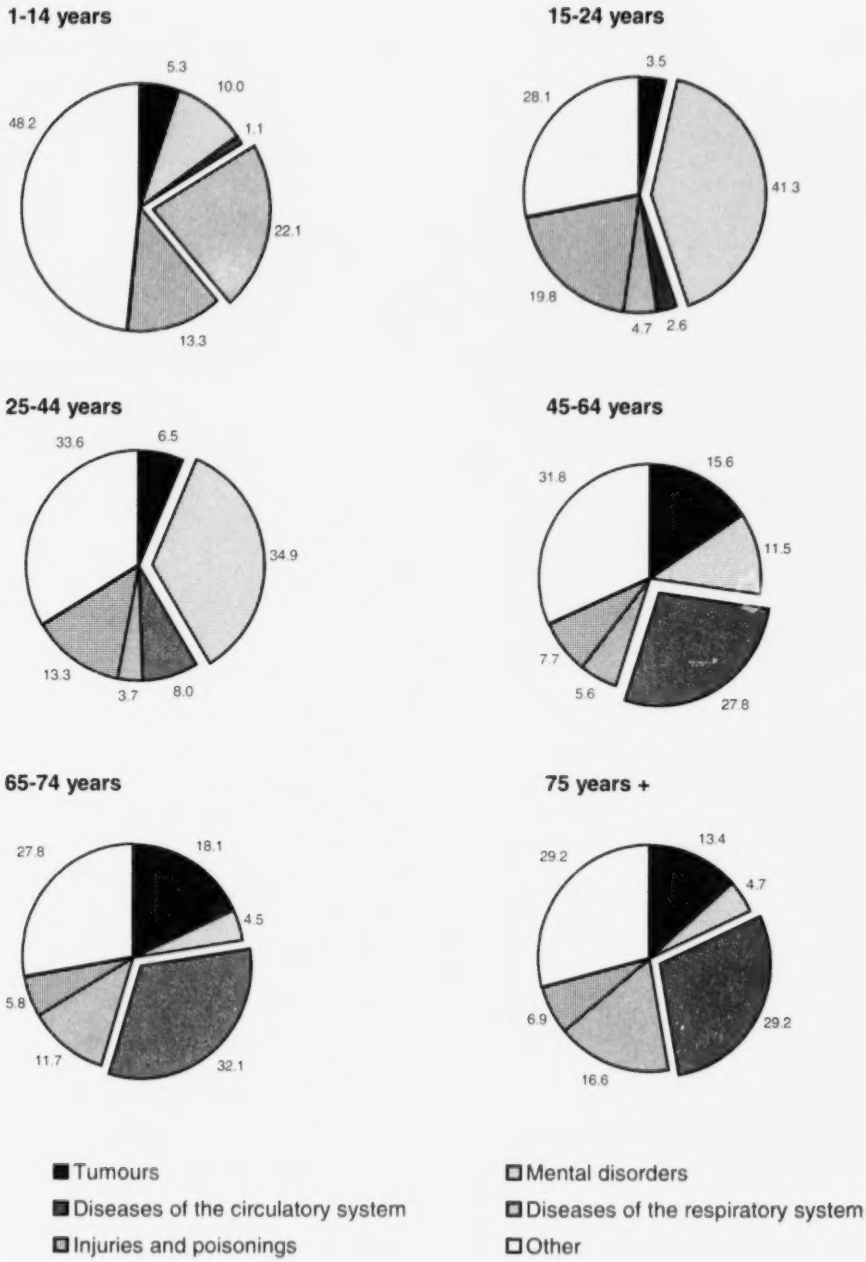
Among adults of both sexes aged 25 to 44, mental health disorders account for a large number of hospital days (233,537). For this age group, injuries are still a major cause of hospitalization for men.

The main causes of hospitalization change from the age of 45 onwards. Cancer and heart disease take over as the pathologies responsible for the highest number of hospital days, although among women aged 45 to 64, mental health disorders continue to be the cause of a high number of hospital days. Among persons aged over 65, however, heart disease is the cause of the highest number of hospital days. Furthermore, with increasing age, respiratory disease reappears as an important cause of hospitalization.

One out of four hospital days involves a person aged 75 and over and the figure is approximately the same for adults aged 45 to 64.

Short-term care for adults aged 45-64 accounted for 1.2 million hospital days in 1998-1999, that is, for 23% of total hospital days in Québec.

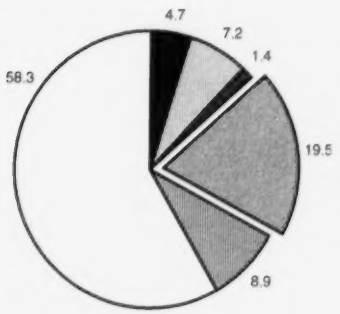
Percentage Distribution of Short-term Hospitalizations by Selected Pathologies (main diagnosis), by Age, Males, 1998-1999



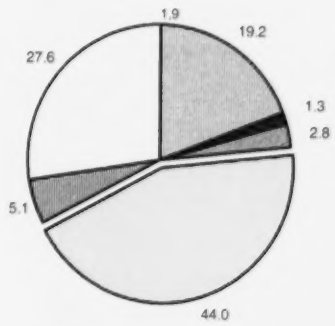
Source: Fichier MED-ECHO 1998-1999, MSSS, Service des indicateurs, January 2000.

Percentage Distribution of Short-term Hospitalizations by Selected Pathologies (main diagnosis), by Age, Females, 1998-1999

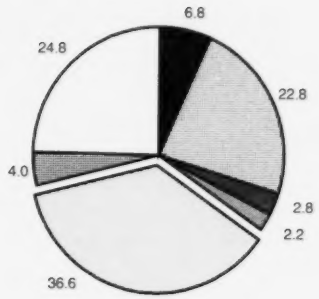
1-14 years



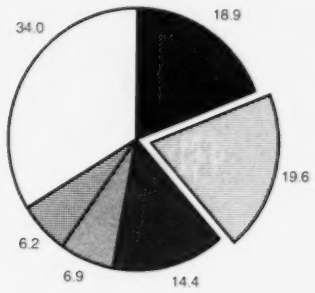
15-24 years



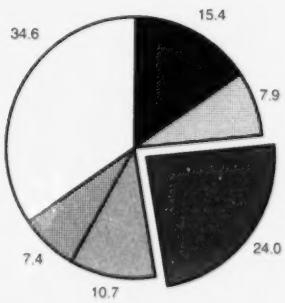
25-44 years



45-64 years



65-74 years



75 years +

- Tumours
- Diseases of the circulatory system
- Childbirth and pregnancy complications
- Other
- Mental disorders
- Diseases of the respiratory system
- Injuries and poisonings

Source : Fichier MED-ECHO 1998-1999, MSSS, Service des indicateurs, January 2000.

Implications

The high number of hospital days among persons aged 75 and over will put more strain on the health care system unless emphasis continues to be placed on ambulatory and primary care in order to ensure continuity of high-quality care for seniors who are ill or whose health is fragile, and on prevention and support measures to promote the health of seniors and keep them in their community.

The high number of hospital days for persons under the age of 64, often for diseases that are preventable at this age (for example, cardiovascular diseases and diabetes), call for actions aimed at reducing the burden of the early onset of chronic diseases.

While prevention and health promotion measures are effective for seniors, they are all the more so for younger persons, allowing them to reach retirement age without having already mortgaged their health.

It is also essential to emphasize ambulatory and primary care. International experience shows that by implementing these services, significant gains can be made in health and in the efficiency of the system for health problems that create high or recurrent demand for care (for example, heart failure, diabetes, cancer). In this respect, important measures have already been proposed by the cancer control program. This more preventive approach to the management of the services provided to the population is leading service administrators in the regions and territories to jointly re-examine the linkages between the services. The aim of this exercise, based on monitoring of progress and problems, is to reduce the consequences and severity of health problems. This approach combines measures to help maintain health for as long as possible and thus reduce the burden of disease and strain on hospital care, both for young and older people

The increase since 1992-1993 in the proportion of adults and seniors who report an activity limitation is associated with the shift to ambulatory care and the trend toward deinstitutionalization. This also reflects the need to support a greater number of persons and their caregivers, for example, through homecare services and ambulatory care.

Life Expectancy

Women have greater life expectancy than men

The life expectancy at birth of male and female Quebeckers has increased considerably over the last two decades. It increased by five years, from 69.5 to 74.9 years for men and from 76.9 to 81.2 years for women. There is still a very wide gender gap although it has slightly narrowed over the last two decades (from 7.4 years in 1976 to 6.3 years in 1997). Thus, in 1997 men had a shorter life expectancy than women. This is mainly due to the fact that men continue to die younger from cardiovascular disease, cancer, suicide and non-intentional injuries.

The increase in the life expectancy of men has been steady over the last twenty years. However, the life expectancy of women has increased substantially during the 1980s and has remained stable since the early 1990s.

Life Expectancy at Birth by Sex, Québec, 1976-1997

	Men	Women
1976	69.5	76.9
1977	69.9	77.5
1978	70.1	77.7
1979	70.6	78.4
1980	70.9	78.6
1981	71.3	79.3
1982	71.7	79.2
1983	71.9	79.4
1984	72.0	79.7
1985	72.1	79.8
1986	72.3	79.6
1987	72.4	79.9
1988	72.7	80.2
1989	72.9	80.5
1990	73.4	80.8
1991	73.7	81.0
1992	74.2	81.3
1993	73.9	80.8
1994	74.3	81.1
1995	74.3	81.0
1996	74.9	81.3
1997	74.9	81.2

Source: Direction générale de la santé publique. Surveillance de la mortalité au Québec, 1976-1997.

The most disadvantaged Quebeckers live an average of six years less than the more advantaged Quebeckers

A study conducted in Québec showed that there are major inequities in the life expectancy of Quebeckers living in private households based on their level of socio-economic disadvantage. Thus, for both sexes combined, the gap in life expectancy is 5.8 years between persons in the most advantaged quintile and those in the most disavantaged quintile. This difference is 8.7 years for men and 2.6 years for women. The differences vary even more based on material disadvantage as compared to social disadvantage that is measured mainly through the social network.

Life Expectancy at Birth of the Private Household Population by Quintile of Disadvantage, Québec, 1995-1997

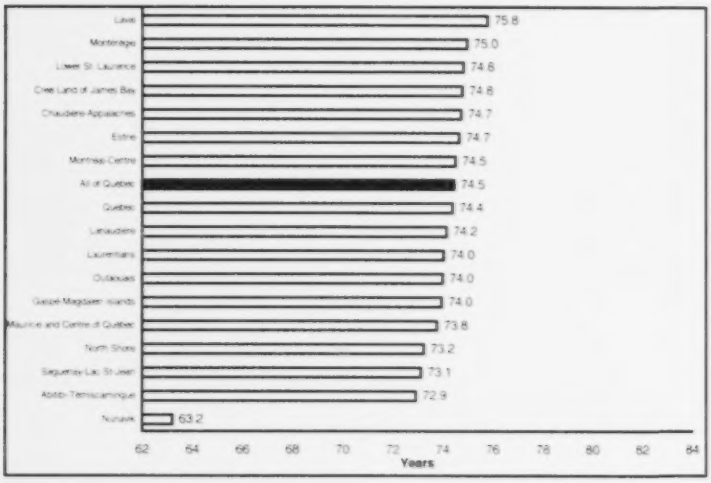
Disadvantage Quintile	Men	Women	Total
		Years	
Material			
1	78.5	84.9	81.9
2	76.4	84.0	80.4
3	75.5	83.7	79.7
4	75.3	83.6	79.5
5	73.7	82.5	77.9
Social			
1	76.5	82.0	79.0
2	76.7	83.6	80.0
3	76.5	84.6	80.7
4	75.8	84.2	80.2
5	73.4	82.9	78.4
Material and social			
1 and 1	79.7	83.7	81.8
5 and 5	71.0	81.1	76.0
Québec	75.8	83.7	79.8

Source: Fichier des décès 1995-1997 ; R. Pampalon et G. Raymond, *Un indice de défavorisation pour la planification de la santé et du bien-être au Québec*, INSP, MSSS, 2000.

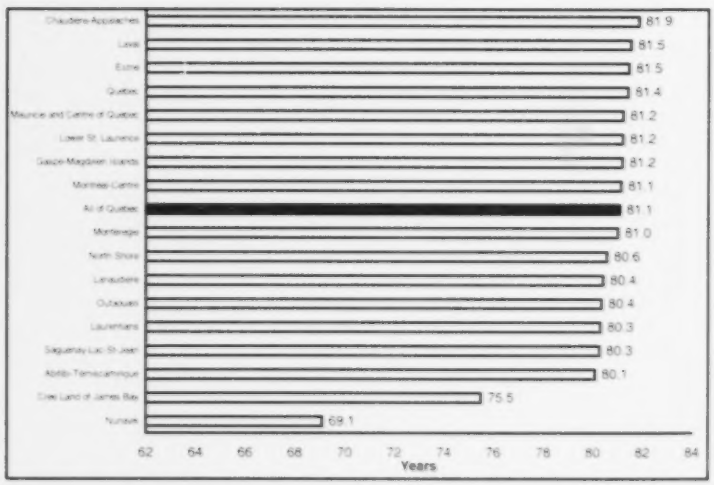
There are great regional differences in life expectancy

The analysis of life expectancy at birth reveals significant differences according to health and social service regions. For the 1993 to 1997 period, the average life expectancy of men was 74.5 years in Québec as a whole. Nunavik men have the shortest life expectancy in Québec (63.2 years), or 12.6 years less than men in the Laval region who have the longest life expectancy (75.8 years). This shorter life expectancy of men in Nunavik is mainly explained by a higher risk of dying young from an accident or suicide. The other regions with the shortest life expectancy for men are Abitibi-Témiscamingue, Saguenay–Lac-Saint-Jean and the North Shore, but with a life expectancy that is on average only one year less than that of all Quebeckers.

Male Life Expectancy at Birth,
by Health and Social Service Region, 1993-1997 Average, Québec



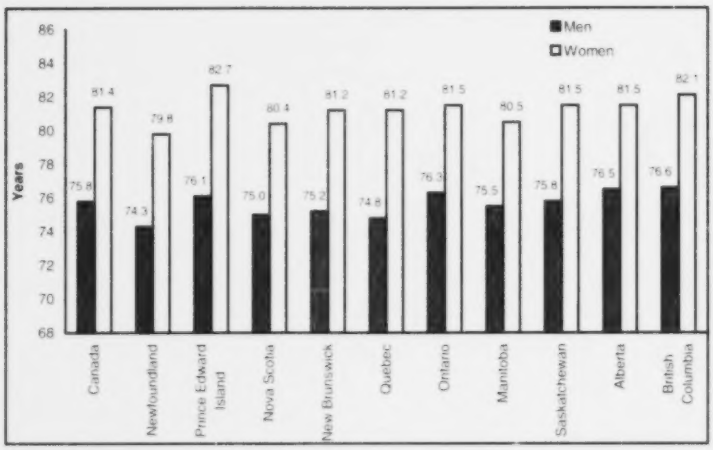
Female Life Expectancy at Birth,
by Health and Social Service Region, 1993-1997 Average, Québec



Source: Direction générale de la santé publique. Surveillance de la mortalité au Québec: 1976-1997.

Among women, there are also significant differences in life expectancy at birth according to health and social service regions. Women in Northern Québec have the greatest life expectancy: 82.3 years. This is due to the fact that more than 90% of this region's population are aged under 65 and its rate of premature mortality is low. Nunavik women have by far the shortest life expectancy (69.1 years), followed by women of the Cree Land of James Bay (75.5 years), that is, twelve and five years less, respectively, than all Québec women. This short life expectancy of Inuit and Cree women is partly explained by high premature mortality associated with accidents and respiratory diseases. Otherwise, there is little difference between the life expectancy of women in other regions of Québec and those in Québec as a whole.

Life Expectancy at Birth, by Sex, Canada, Provinces, 1997 (in years)



Source: Statistics Canada

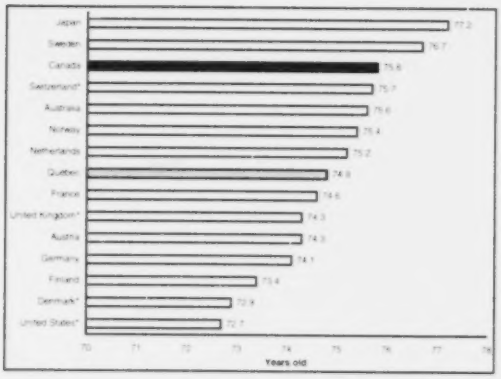
Québec men have one of the shortest life expectancies in Canada

The life expectancy of Québec women is slightly shorter than the Canadian average. Women in Prince Edward Island and British Columbia have the greatest life expectancy in Canada. The situation is even worse for Québec men. The life expectancy of men in Québec and Newfoundland is the shortest among Canadians (74.8 and 74.3 years). Men in British Columbia have the greatest longevity (76.6 years).

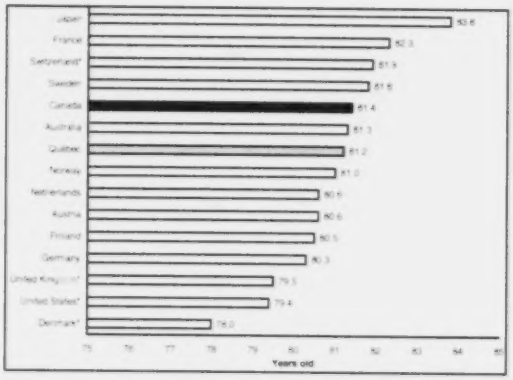
In terms of life expectancy at birth, Québec falls within the average of all industrialized countries. The life expectancy of men is greater in Japan, Sweden, Switzerland, Australia, Norway and the Netherlands compared to Québec; the Japanese live 2.5 years more than Quebeckers.

Life Expectancy at Birth, by Selected Countries, 1997

Men



Women



* 1996 data.

Source: Eco Health. OECD 1999

Compared to women in other industrialized countries, Québec women have a fairly good life expectancy. They are surpassed only by women in Japan, France, Switzerland, Sweden and Australia, their life expectancy being 2.6 years less than that of Japanese women.

Implications

The gain of five additional years in life expectancy in the space of twenty years reflects the improvement in living conditions and the development of the Québec health and social service system, which is centred on both health care and prevention. However, it is worrying to note that very few of these gains were achieved in the last six years (from 1991 to 1997), in particular among women, regardless of age group.

On the other hand, the reduction in the gaps in life expectancy between Quebeckers of different regions and income levels will be a major challenge in the coming years for the entire health and social service network and also for the other sectors in society whose decisions have an influence on the health of the population.

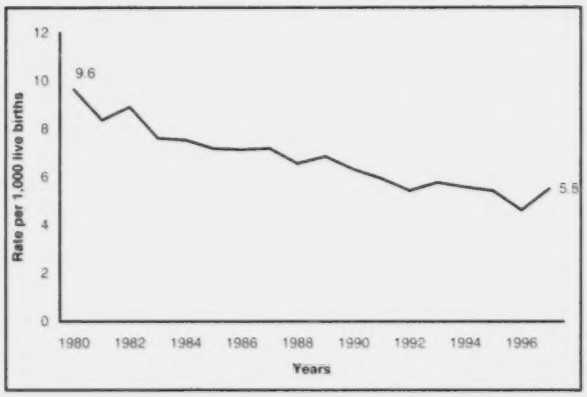
Life expectancy, which is still shorter than that in several Canadian provinces, indicates that an improvement is both necessary and achievable by reducing diseases which kill prematurally in Québec. These diseases are very often related to smoking or severe distress that leads to suicide.

Infant Mortality

Infant mortality has declined dramatically in recent years

Infant mortality in Québec has declined dramatically since the early 1980s. The infant mortality rate fell from 9.6 to 5.5 per 1,000 live births between 1980 and 1997. This substantial decrease is attributed in particular to improvement in Quebeckers' living conditions and great efforts made in neonatalogy, as well as a better survival rate of premature or newborns with birth defects. However, the improvement in infant mortality has slowed down in recent years.

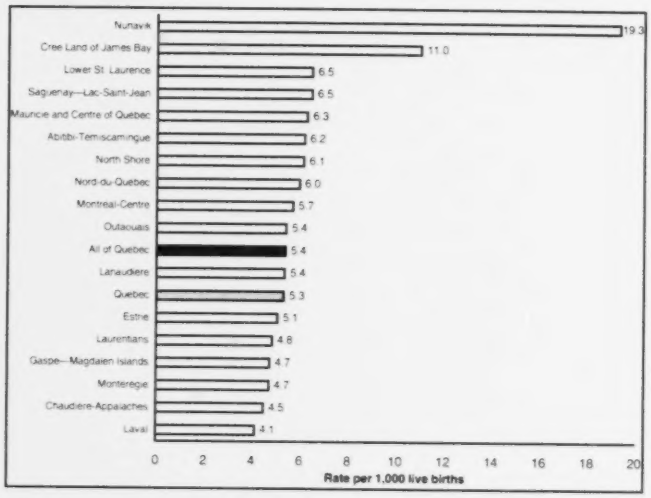
Infant Mortality Rate (0-364 days), Québec, 1980-1997



Source: Direction générale de la santé publique, Surveillance de la mortalité au Québec, 1976-1997.

Infant mortality rates vary greatly between the Québec regions. The Nunavik and Cree Land of James Bay regions still have very high infant mortality rates, three times and two times higher, respectively, than the Québec average (19.3 and 11.0 per 1,000 live births). These rates stand out from the other Québec regions, but are comparable to what was observed in all of Québec in the 1970s and 1980s. In contrast, the lowest infant mortality rates are found in the Laval and Chaudière-Appalaches regions.

Infant Mortality Rates (0-364 days) by Health and Social Service Region, Québec, 1993-1997



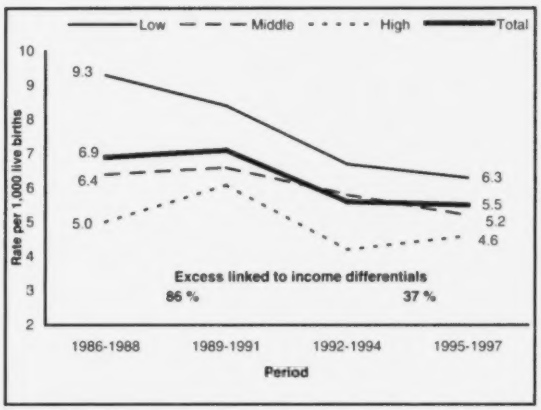
Source: Direction générale de la santé publique. Surveillance de la mortalité au Québec, 1976-1997

The infant mortality rate is still higher in disadvantaged environments than advantaged environments despite of a significant narrowing of gaps

Although infant mortality has decreased significantly in recent years, it can still be improved. Studies conducted in the Montréal-Centre[1] region revealed that infant mortality is unfortunately still associated with poverty. Analysis based on income carried out over four periods extending from 1986 to 1997, showed that infant mortality is inversely related to income. For each period examined, higher infant mortality rates were observed in babies living in a low-income environment, compared to those living in more privileged environments. For the last period (1995-1997), the mortality rate in the low-income third was 6.3 for 1,000 live births compared to 5.5 for the general population and 4.6 for the high-income third. However, the gaps have narrowed: the excess between the low- and high-income thirds, which was 86% for the 1986-1988 period, was only 37% for the last period (1995-1997).

1. Robert Choinière, Direction de la santé publique de Montréal-Centre, 2000, www.santepub-mtl.qc.ca.

Comparative Infant Mortality Rates,
Based on Income Thirds, Montréal-Centre, 1986-1997

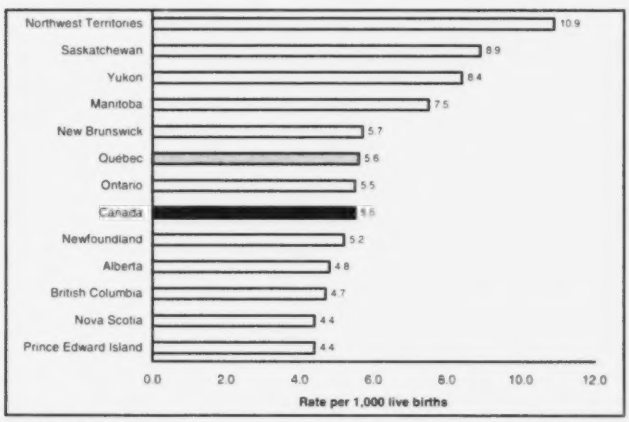


Source: Robert Choinière, Direction de la santé publique de Montréal-Centre, 2000.
www.santepub-mtl.qc.ca

Québec's infant mortality rate is now comparable to that of Ontario, reflecting the considerable efforts made in the field of perinatality in Québec since the 1970s

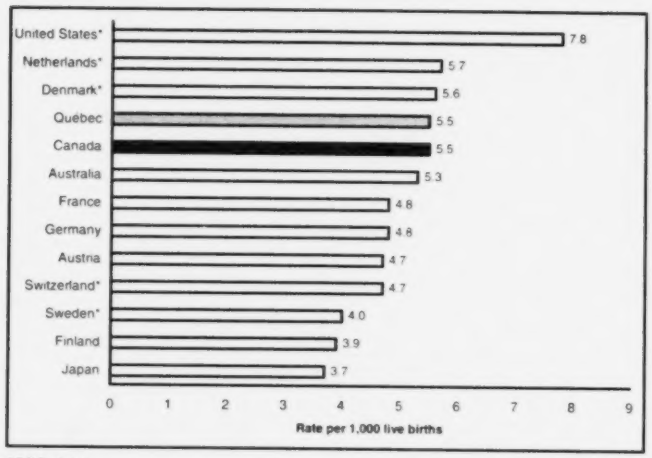
There are considerable differences in infant mortality rates betwwen the provinces of Canada. Like Ontario, Québec falls within the Canadian average, but it should be recalled that Québec had the highest rate in Canada in the early 1970s.

Infant Mortality Rates (0-364 days),
Canada, the Provinces, 1997



Source: Statistics Canada.

Infant Mortality Rates (0-364 days) by Selected Industrialized Countries, 1997



* 1996 data.

Source: Eco Health, OECD 1999

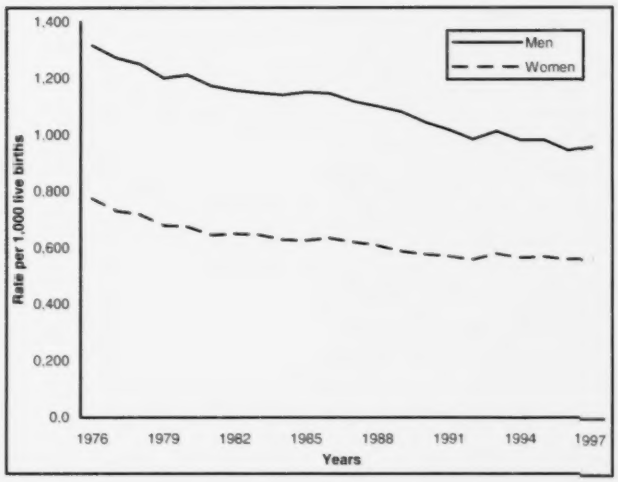
Québec's infant mortality rate is still higher than that of several industrialized countries

An international comparison shows that, although Québec has made spectacular gains in infant mortality rate (5.5 per 1,000 live births), it still does not figure among the industrialized countries with the lowest infant mortality rates. The lowest infant mortality rates in the world are found in Japan (3.7 per 1,000 live births), Finland (3.9) and Sweden (4.0). However, Québec ranks much higher than the United States (7.8).

Changes In Mortality

Both the annual number of deaths and the population have increased steadily since the beginning of the century. However, the comparative mortality rate, which cancels out the effect of population aging and thus yields a better measure of death risk, has decreased. This apparent contradiction reflects the effect of two different trends, that is, population increase and aging and decrease in death risk before age 70, as expressed by the increase in life expectancy. This is the combined effect of two realities, that is, on average Québec men and women are dying at an older age, and the population is increasing and aging.

Changes in Comparative Mortality Rate
For All Causes, by Sex, Québec, 1976-1997



Source: Direction générale de la santé publique, Surveillance de la mortalité au Québec, 1976-1997.

A 29% decline in mortality rate over the last two decades

In 1997, there were 54,281 deaths in total in the Québec population. In 1976, the corresponding number of deaths was 43,801. Using a measure which cancels out the effect of population aging, a decrease in death risks is observed. The comparative death rate by age declined by 29% during this period, from 1,017.1 to 725.8 per 100,000 population. The decrease was similar for both sexes. It has affected all age groups but to varying degrees. The sharpest decline was observed among young people under the age of 24. It is attributed to the fall in infant mortality and accidents. The decline is less substantial for men and women aged 25 to 44 and 75 and over.

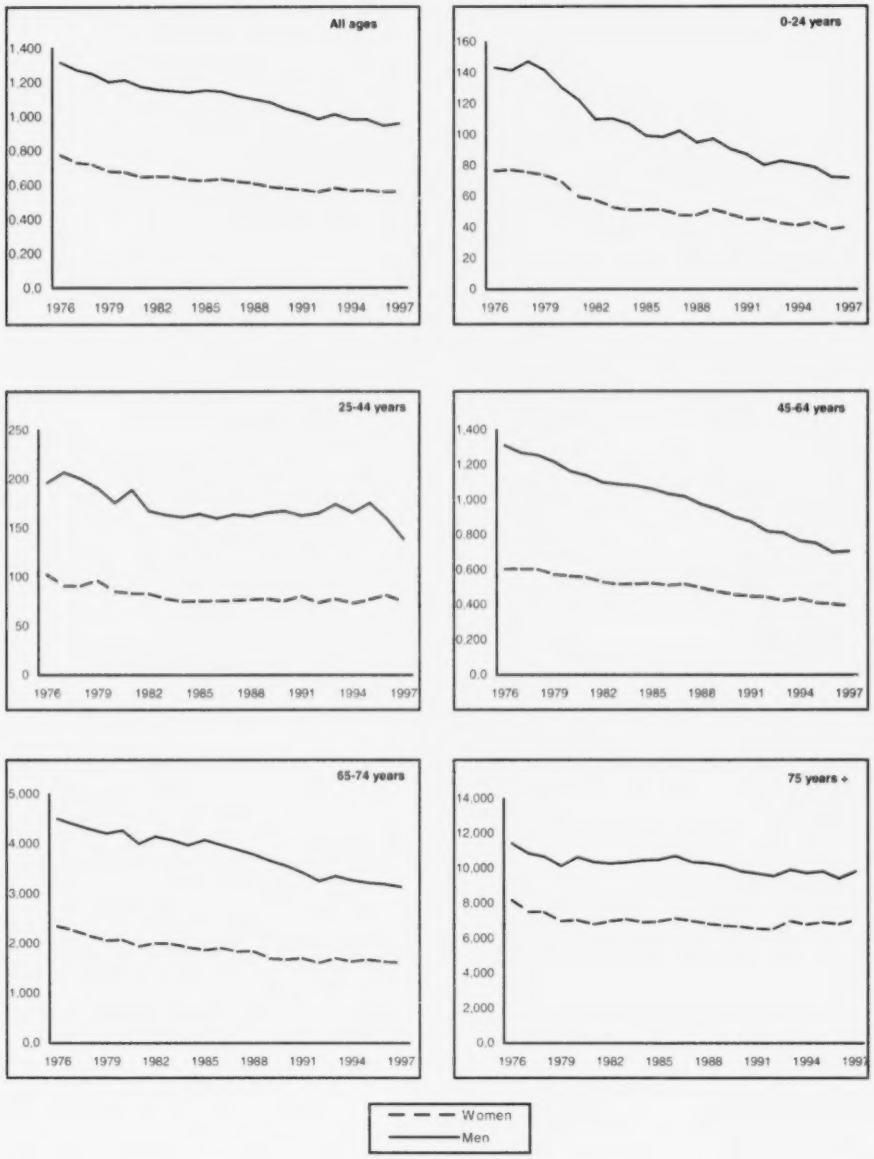
Men die younger than women and have always had higher mortality rates than women, regardless of age group.

Mortality Rates per 100,000 Population For All Causes in 1997 and Evolution by Sex and Age, Québec, 1976-1997

	Men	Women	Total
Total			
1997 comparative rate	958.4	563.2	725.8
Change in rate 1976-1997 (%)	-27.2	-27.5	-28.6
Under 65			
1997 rate	259.7	148.8	204.8
Change in rate 1976-1997 (%)	-32.9	-23.8	-29.8
Under 25			
1997 rate	71.9	40.4	56.5
Change in rate 1976-1997 (%)	-49.9	-47.3	-49.0
25-44 years old			
1997 rate	138.9	74.7	107.3
Change in rate 1976-1997 (%)	-29.2	-27.7	-28.7
45-64 years old			
1997 rate	706.4	395.1	548.4
Change in rate 1976-1997 (%)	-46.2	-34.6	-42.1
65-74 years old			
1997 rate	3 139.4	1 616.8	2 299.3
Change in rate 1976-1997 (%)	-30.4	-31.3	-30.8
75 and over			
1997 rate	9 836.8	7 047.3	8 026.2
Change in rate 1976-1997 (%)	-14.1	-14.3	-15.4

Source: Direction générale de la santé publique, janvier 2000.

Changes in Mortality Rates For All Causes, by Sex and Age, 1976-1997 (rate per 100,000 population)

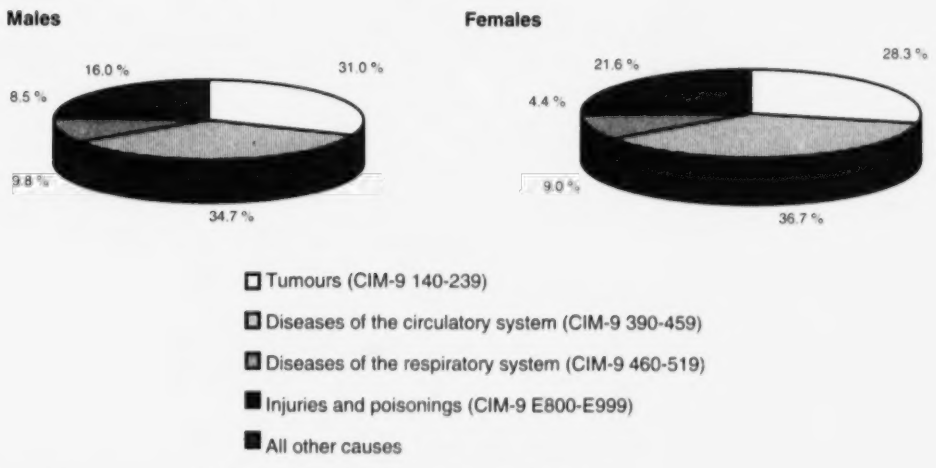


Source: Direction générale de la santé publique, Surveillance de la mortalité au Québec, 1976-1997.

Men and women are affected by the same causes of death

Cardiovascular disease is the major cause of death, accounting for over one third of deaths, followed by cancer (approximately 30%), violent deaths and respiratory disease. The risks of dying from diseases are similar for both men and women, but injuries result in twice as many deaths among men than women (8% vs. 4%).

Percentage Distribution of Deaths by Cause, Québec, 1997



Source: Direction générale de la santé publique, Surveillance de la mortalité au Québec, 1976-1997.

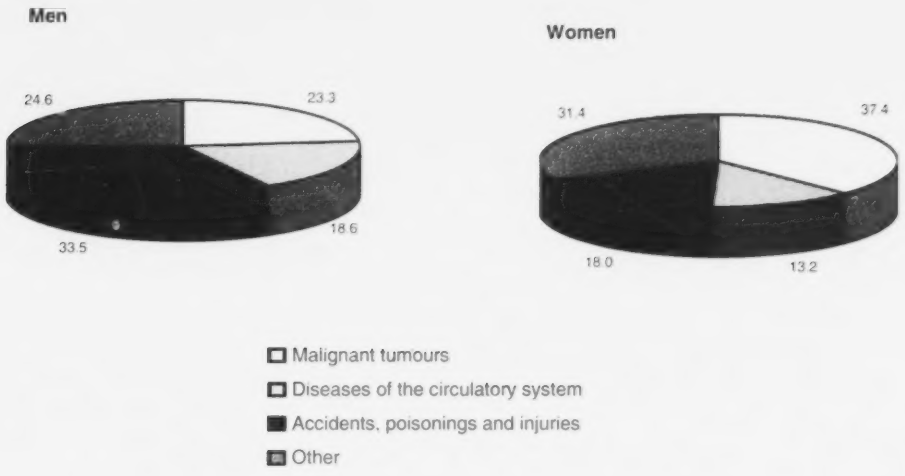
The rate of potential years of life lost is two times higher for men than for women

The situation of early mortality is, however, very different. Potential years of life lost (PYLL) provide an indicator of premature mortality that accounts for the greater or lower incidence of early deaths. This indicator measures the number of years that each individual who dies prematurely, that is, before the threshold age of 70, has not lived (for example, a death at age 45 represents twenty five years of life lost).

Men lose two times more potential years of life than women (64.3 per 100,000 population compared to 33.2 for women). One third of potential years of life lost by men is due to injuries and poisonings, nearly half of which are related to suicide, while cancer accounts for one quarter and cardiovacular disease approximately one fifth.

Among women, 37% of potential years of life lost are due to cancer and slightly less than 20% to injuries and poisonings. Only 13.2% of potential years of life lost are associated with diseases of the circulatory system, which affect women slightly later in life.

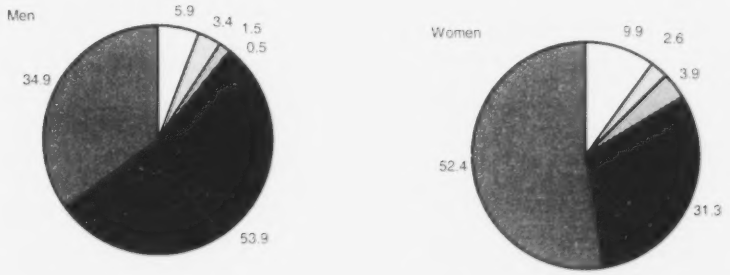
Distribution of Principal Causes of Potential Years of Life Lost Before Age 70, Québec, 1997



Source: Direction generale de la santé publique, Surveillance de la mortalite au Quebec, 1976-1997

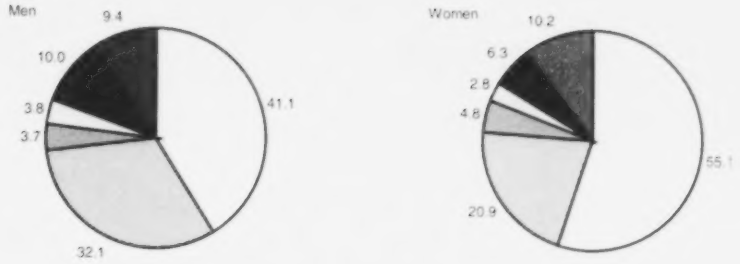
Young adults die mainly as a result of injuries and poisoning while more seniors die as a result of chronic diseases

Under 25 years old

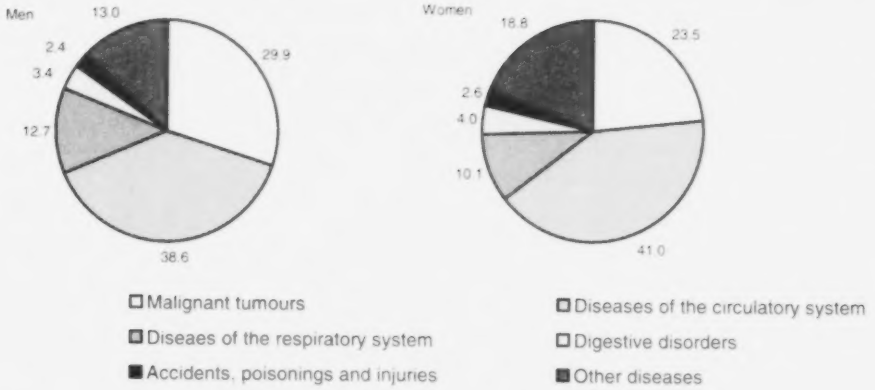


25-44 years old

45-64 years old



65 years and over



Source: Bureau de surveillance épidémiologique, Fichier des décès 1997.

➢ **Mortality causes among persons under the age of 25: injuries and poisonings followed by cancer**

More than half of deaths among boys and young men aged under 25 are the result of injuries and poisonings, whereas among women, this cause accounts for slightly less than one third of deaths. Cancer is the second leading mortality cause.

➢ **Mortality causes among persons aged 25-44: injuries and poisonings, followed by cancer, among young men; cancer among young women**

As for persons under 24 years old, half of deaths among men aged 25 to 44 are associated with accidents, poisonings or injuries and 15% are due to cancer. For women of the same age, four in ten deaths are attributed to cancer and only one in four deaths is associated with accidents, poisonings and injuries.

➢ **Mortality causes among persons aged 45-64: cancer followed by cardiovascular disease**

For both men and women, cancer is the cause of the highest number of deaths among persons aged 45-64 (41.1% and 55.1%). Diseases of the circulatory system are the second leading cause of death (32.1% and 20.9%), followed by injuries.

Among men aged under 45, slightly more than one in two deaths are due to intentional or non-intentional injuries, that is, preventable deaths. This proportion is less among women but is also quite considerable, accounting for nearly three out ot ten deaths.

After the age of 45, injuries are much less significant in mortality causes whereas cancer and disease of the circulatory system, which increase with age, account for nearly 75% of deaths.

➢ **Mortality causes among people aged 65 and over: chronic diseases**

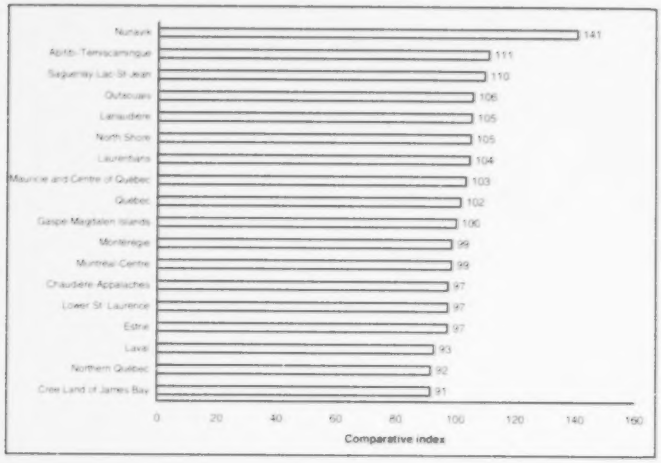
Diseases of the circulatory system are the leading cause of death and account for four out of ten deaths among people aged 65 and over (38.6% men and 41% women). Cancer follows with 30% of deaths among men and 23.5% of deaths among women. Diseases of the respiratory system rank third with slightly more than 10% of all deaths.

Great regional differences in mortality rates still exist in Québec despite the spectacular decline over the last decades

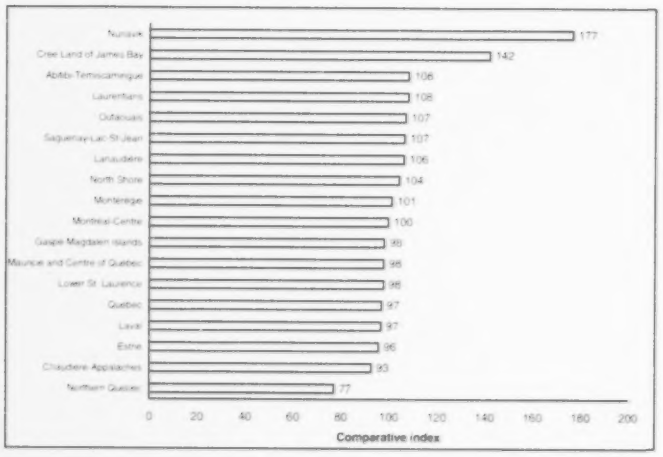
Despite the substantial decline in mortality in Québec in recent years, a comparison of mortality rates for all causes by region shows that there are still great differences between a number of regions and Québec as a whole. Among men, nine regions have a mortality rate that is higher than that of Québec as a whole, including Nunavik which has the highest male mortality rate in Québec. Similarly, among women, nine regions have a mortality rate that is higher than that of Québec as a whole, but the rates in two regions, Nunavik and Cree Land of James Bay, clearly stand out from the others because of their high rates. The mortality rate recorded in Nunavik in 1993-1997 was comparable to that observed in 1976 for all of Québec.

Mortality Index, All Causes, by Health and Social Service Region, Québec, 1993-1997
(all of Québec = 100)

Men



Women



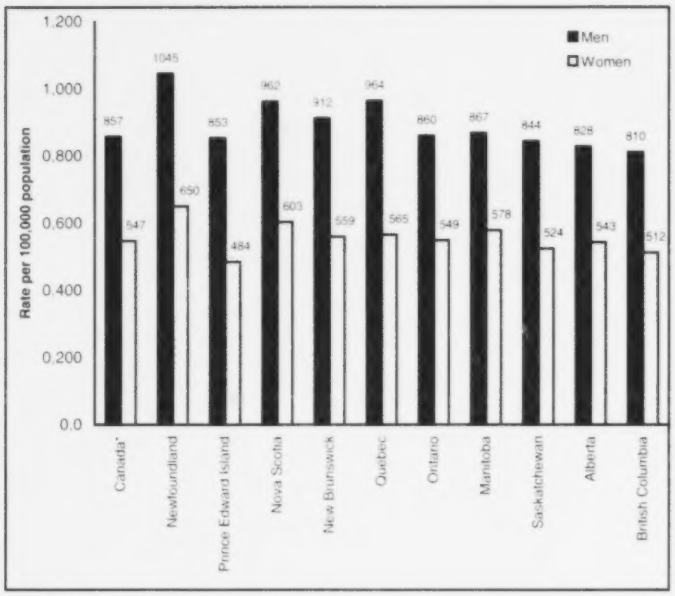
Source: Direction générale de la santé publique. Surveillance de la mortalité au Québec, 1976-1997.

The second highest mortality rate for men after Newfoundland: more men die prematurely in Québec

The comparison of mortality rates for all causes with the other Canadian provinces reveals that, despite the substantial decline in mortality rates in Québec over the last decades, Québec still has mortality rates for both men and women that are higher than those in the rest of Canada. However, among men, the difference between the Canadian and Québec rates is markedly greater. Only male Newfoundlanders have a higher mortality than that of male Quebeckers. Among women, the Québec mortality rates rank fourth behind Newfoundland, Nova Scotia and Manitoba.

This excess mortality of Québec men is mainly explained by smoking-related diseases as well as suicide among younger men.

Comparative Mortality Rates per 100,000 Population, For All Causes, Canada, the Provinces, 1997



* Excluding Québec.

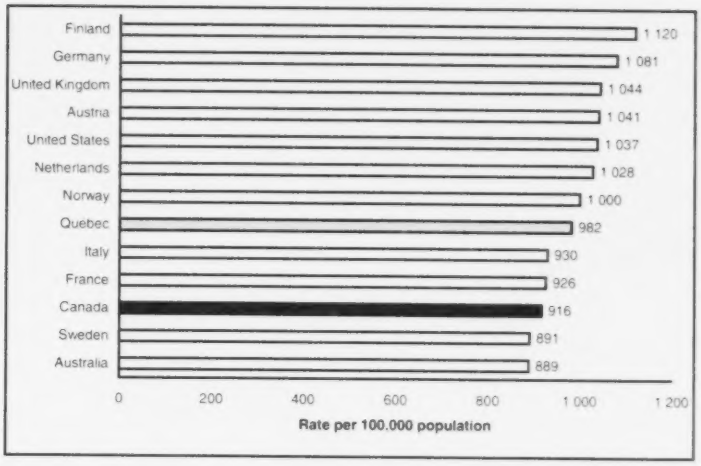
Source: Statistics Canada (unpublished data)

Quebeckers have a relatively low mortality rate as compared with several industrialized countries

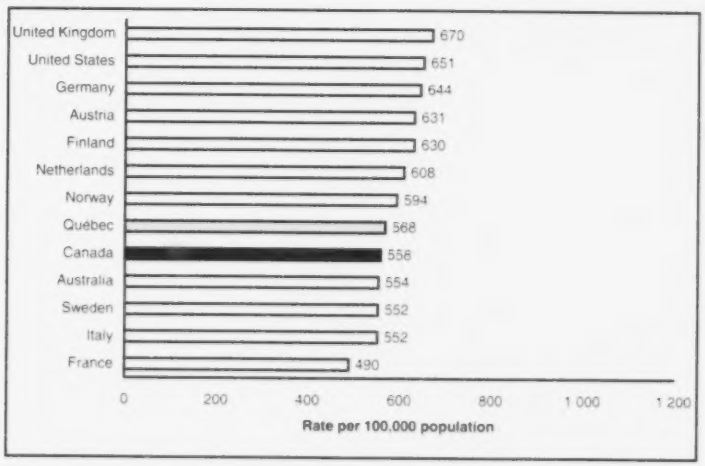
Comparison with other industrialized countries shows that for both sexes, mortality rates for Québec fall within the average. Sweden, Australia, France and Italy are the only countries which have lower mortality rates for both sexes for all mortality causes.

Comparative Mortality Rates For All Causes, by Selected Industrialized Countries, 1995

Men



Women



Source: World Health Organisation, compiled by Bureau of Surveillance and Field Epidemiology, February 2000.

Implications

Despite great improvements in life expectancy and infant mortality in Québec over the last twenty years, great inequities still exist depending on the environment.

The distinctly shorter life expectancy of Quebeckers in Nunavik and other disadvantaged environments require that all those who provide care and services rapidly implement interventions and measures to promote the health of these groups of Quebeckers, whose health is often compromised from the moment of their birth.

Principal Health Problems Of Quebeckers

Arthritis, rheumatism and hypertension are the most common chronic diseases

The 1998 Health and Social Survey revealed that the chronic diseases that were most often reported by the Québec general population were arthritis and rheumatism (13.2 per 100 population), hypertension (8.5), respiratory disease (5.8), heart disease (5.2), asthma (5.0) and mental disorder (4.8). The incidence of health problems varied according to gender. Women reported higher incidence rates than men for most chronic diseases, although in some cases these differences were not statistically significant. The category of disease where there was the greatest gender difference was arthritis and rheumatism (16.6 for women vs. 9.6 for men), which reflects the fact that there is a higher proportion of older women than older men.

Incidence of Health Problems by Sex, Québec, 1987 and 1998

Health problems	Problems per 100 population					
	Men		Women		Total	
	1987	1998	1987	1998	1987	1998
Arthritis and rheumatism	7.7	9.6	13.7	16.6	10.7	13.2
Hypertension	4.7	7.0	7.9	10.0	6.3	8.5
Respiratory disease	4.2	5.1	4.3	6.4	4.3	5.8
Heart disease	4.1	5.3	4.3	5.1	4.2	5.2
Asthma	2.2	4.5	2.4	5.4	2.3	5.0
Mental disorder	3.7	3.9	5.4	5.6	4.6	4.8
Diabetes	1.4	2.7	1.9	2.9	1.7	2.8
Bronchitis or emphysema	1.8	2.2	1.9	2.7	1.9	2.5

Source: 1997 Santé Québec Survey and 1998 Health and Social Survey

Increase in diabetes, arthritis, asthma and other chronic diseases since 1987

A comparison of the results of two Santé Québec surveys (1987 and 1998) reveals an increase in the incidence of chronic diseases reported for most categories except mental disorders.

The incidence and type of chronic conditions reported in the surveys varied considerably according to age. Among young people under age 25, asthma (6.6 among persons aged 0-14 and 5.6 among persons aged 15-24) was the most common chronic condition reported. Arthritis and rheumatism were reported by 9.6% of the population and mental disorders by 5.1%, followed by asthma by 4%.

Among Quebeckers aged 45 to 64, nearly one out of five reported having arthritis and rheumatism, 14.7% hypertension, 7% heart disease and 7% reported that they suffered from a mental disorder.

Quebeckers aged 65 and over reported the highest incidence of health problems. In 1998, approximately four out of ten seniors reported suffering from arthritis and rheumatism or hypertension problems. Slightly more than 25% of this population had a heart condition and 11% reported having diabetes. Although since 1987 there has been a substantial increase in hypertension and cardiac disease among people aged 65 and over, there has been little change in the incidence of these problems among adults aged 45 to 64. The highest increase in incidence of chronic disease since 1987 has been for diabetes. The prevalence of this disease has nearly doubled among people over age 65.

Incidence of Health Problems by Sex, Among People Aged 65 and Over, Québec, 1987 and 1998

Health problems	Problems per 100 population					
	Men		Women		Total	
	1987	1998	1987	1998	1987	1998
Arthritis and rheumatism	29.0	27.6	43.5	47.1	37.4	38.8
Hypertension	19.2	30.9	33.6	42.0	27.6	37.3
Heart diseases	23.5	27.2	21.2	25.8	22.2	26.4
Diabetes	5.6	10.6	7.7	11.3	6.8	11.0

Source: 1987 Sante Quebec Survey and 1998 Health and Social Survey.

AIDS

In recent decades, the prevalence of infectious diseases has radically declined as a result of prevention and control measures. However, during these same years, new health problems have appeared, including AIDS.

On December 31, 1999, there were 5,565 reported AIDS cases in Québec, 4,925 males and 640 females. Since 1996, there has been a decline in the number of AIDS cases reported. In fact, the incidence rate observed in 1999 was 0.5% per 100,000 population compared with 5.1% in 1996. Montréal-Centre is the region where the highest number of reported AIDS cases were recorded.

This change in the diagnostic profile is undoubtedly related to new anti-HIV treatments. However, it should be noted that the interval between HIV infection and manifestation of AIDS symptoms can be ten years or longer.

Total Number of Reported AIDS Cases and Incidence Rates by Age at Diagnosis of Disease, by Year of Diagnosis,[1] December 31, 1999, Québec

	Year of diagnosis													
	1979-1994		1995		1996		1997		1998		1999		Total	
Age group	n	Rate[2]	n	Rate[3]	n	Rate[3]	n	Rate[3]	n	Rate[3]	n	Rate[3]	n	Rate[4]
< 15	72	0.3	12	0.9	5	0.4	7	0.5	0	0.0	1	0.1	97	7.0
15-19	17	0.2	0	0.0	2	0.4	1	0.2	0	0.0	0	0.0	20	4.3
20-24	154	1.5	10	2.1	8	1.7	3	0.6	0	0.0	0	0.0	175	32.0
25-29	620	5.9	58	10.8	30	5.8	12	2.4	18	3.6	0	0.0	738	110.8
30-34	987	10.2	105	15.9	75	11.7	46	7.4	29	4.9	9	1.6	1251	191.1
35-39	926	10.6	117	17.7	92	13.7	52	7.7	35	5.2	11	1.6	1233	211.7
40-44	693	9.3	81	13.6	70	11.5	37	5.9	21	3.3	10	1.5	912	173.3
45-49	396	6.9	80	14.8	37	6.7	29	5.2	22	3.9	3	0.5	567	135.4
50-54	187	3.5	28	6.4	30	6.6	15	3.1	7	1.4	3	0.6	270	80.0
55-59	111	2.1	19	5.6	11	3.1	7	1.9	4	1.0	2	0.5	154	46.2
60 +	112	0.7	14	1.2	14	1.2	4	0.3	2	0.2	2	0.2	148	14.3
Total	4275	4.0	524	7.1	374	5.1	213	2.9	138	1.8	41	0.5	5565	80.1

1 : For aggregation of years of diagnosis, see technical note 3.4.
2 : Average annual incidence per 100,000 population (see technical note 4.1b).
3 : Annual incidence per 100,000 population (see technical note 4.1a).
4 : Cumulative incidence per 100,000 population (see technical note 4.2).

Source: Surveillance des cas de syndrome d'immunodeficience acquise (SIDA). Québec. 1979-1999 cumulative cases, update No. 1999-2, December 31, 1999. Québec.

Alzheimer's

The increase in the number of seniors has been accompanied by an increase in cognitive health problems such as Alzheimer's disease and other forms of dementia. The study on health and aging in Canada estimated that 8% of people over age 65 are affected by some form of dementia and that this figure is 35% for those aged 85 and over.

This estimate implies that in 1999, there were 77,183 persons in Québec suffering from dementia, the majority of whom had Alzheimer's disease, and this figure would be 103,784 in 2009.

Diabetes

A comparison of the 1987 Santé Québec Survey and 1998 Health and Social Survey shows that diabetes has been on the increase in Québec. The rates of prevalence observed in these surveys were underestimated due to the self-reporting methodology used and did not give a full account of the extent of this health problem.

Preliminary data calculated from medical consultations with doctors set the prevalence of diabetes at 5.6% for the population aged 15 and over and 15.5% for the population aged 65 and over. These last data are distinctly higher than those produced in the recent health survey. Moreover, although distinctly higher, the data estimated on the basis of medical consultations were also underestimated since a great number of people suffering from diabetes had not been diagnosed.

Although the prevalence of diabetes is high in the Québec general population, it is even higher in the Aboriginal communities. A monitoring project developed among the Cree revealed that the prevalence of diabetes in this community's population aged 15 and over was two times the rate for the same population in all of Québec.

Prevalence of Diabetes in Québec in 1998 Based on Data from RAMQ and the 1998 Québec Health and Social Survey (preliminary data)

Age group	RAMQ			Health and Social Survey		
	Men	Women	Total	Men	Women	Total
15 and +	5.81	5.89	5.85	3.35	3.57	3.46
45 and +	11.74	10.15	10.89	6.77	6.36	6.55
65 and +	16.57	14.79	15.52	10.59	11.33	11.01
Total	**4.75**	**4.89**	**4.82**	**2.72**	**2.93**	**2.82**

Source: Bureau de surveillance épidémiologique (preliminary data), December 1999.

Cardiovascular Disease

Cardiovascular disease is the major cause of death

In 1997, cardiovascular disease was the major cause of death in Québec, accounting for approximately 20,000 deaths per year, 9,821 males and 9,515 females. Ischemic heart disease (myocardial infarction or heart failure) is responsible for the greatest number of deaths from cardiovascular disease in men and women.

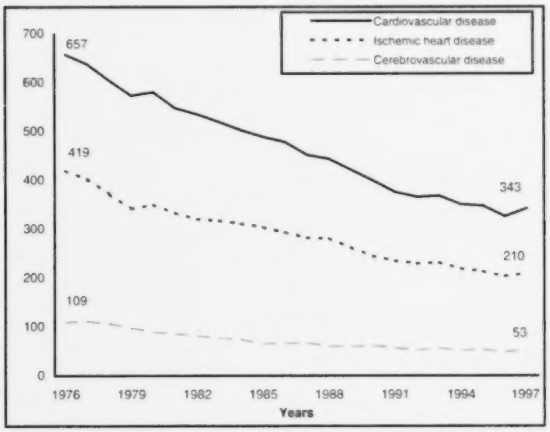
The rate of cardiovascular disease mortality has declined by half over the last twenty years

Unlike other chronic diseases, improved care for coronary heart disease and hypertension has reduced cardiovascular disease mortality. From 1976 to 1996, deaths attributable to cardiovascular disease have declined by 50% for both sexes. This decline applies equally to ischemic heart disease and cerebrovascular disease, two major components of cardiovascular disease. However, in recent years, the decrease in mortality rates has slowed down.

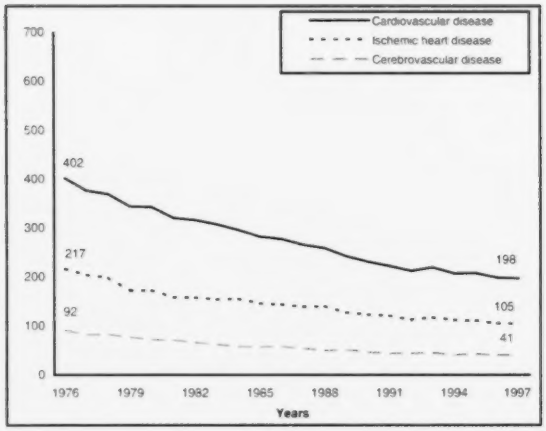
However, people with cardiovascular disease are living longer and may also develop heart failure, which should increase hospitalization related to this problem.

Changes in Comparative Mortality Rate, Cardiovascular Disease, Québec, 1976-1997

Men



Women

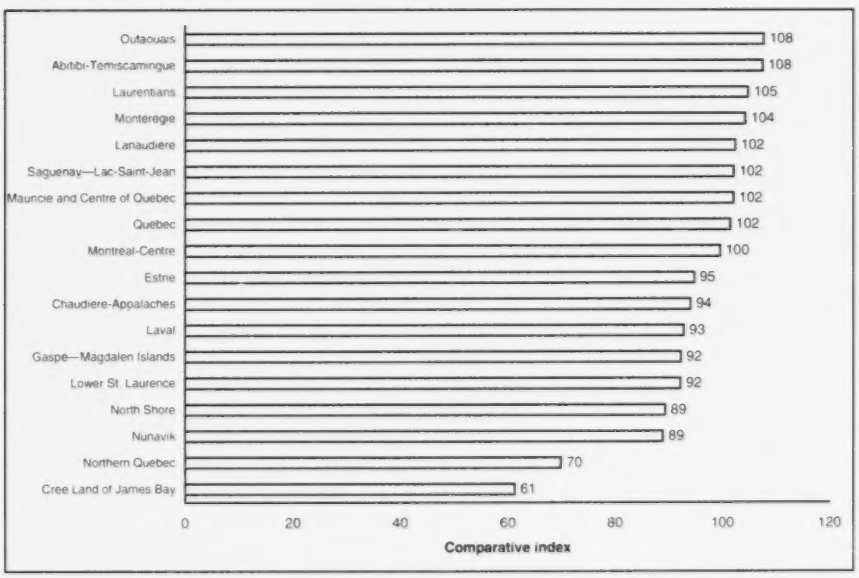


Source: Direction générale de la santé publique, Surveillance de la mortalité au Québec, 1976-1997.

Four regions in which cardiovascular disease mortality rates are significantly higher than the provincial average for men and women are: Outaouais, Abitibi-Témiscamingue, Laurentians and Montérégie.

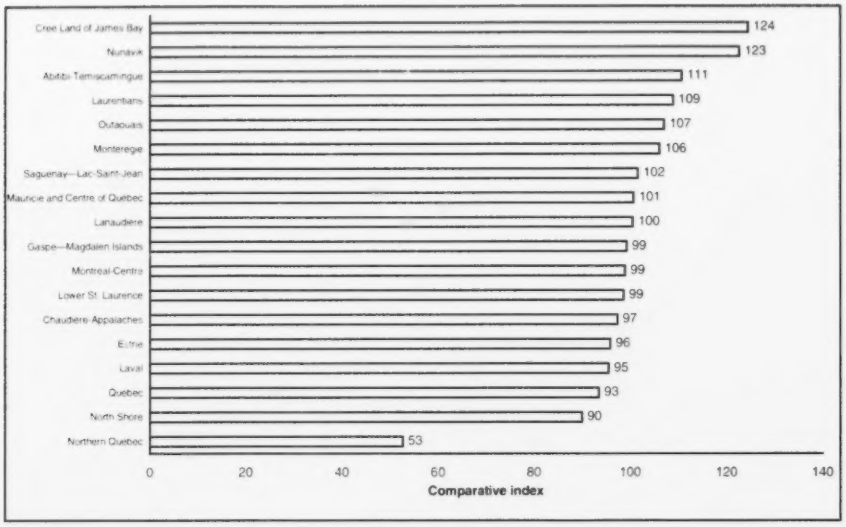
Mortality Index, Cardiovascular Disease, by Health and Social Service Region, Québec, 1993-1997
(all of Québec = 100)

Men



Source: Direction générale de la santé publique, Surveillance de la mortalité au Québec, 1976-1997.

Women



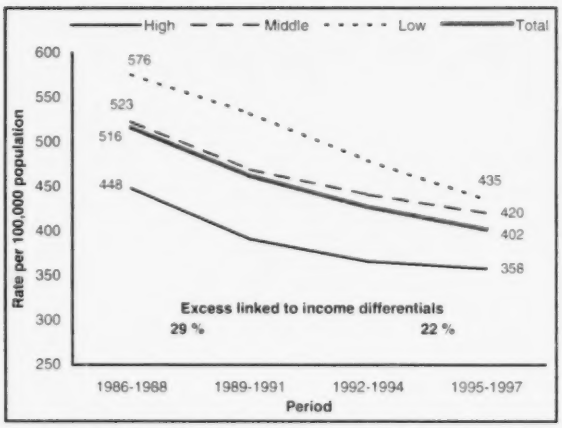
Source: Direction générale de la santé publique. Surveillance de la mortalité au Québec, 1976-1997.

Cardiovascular disease mortality: although the gaps have been narrowing over the last ten years, there are still great variations according to income

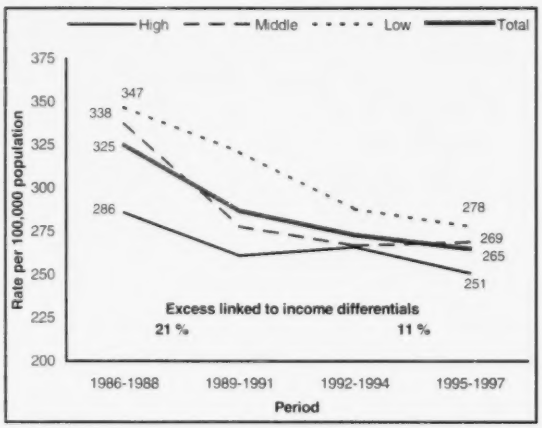
Cardiovascular disease mortality has been declining over the years in all population groups, regardless of income. However, despite this impressive decline, there are still great variations according to income levels. An analysis conducted in the Montréal-Centre region for the last period (1995-1997) reveals an excess linked to income differentials of 22% for men and 11% for women between the population in the low-income third and the population in the highest income bracket.

Comparative Mortality Rates for Cardiovascular Disease Based on Income Thirds, Montréal-Centre, 1986-1997

Men



Women



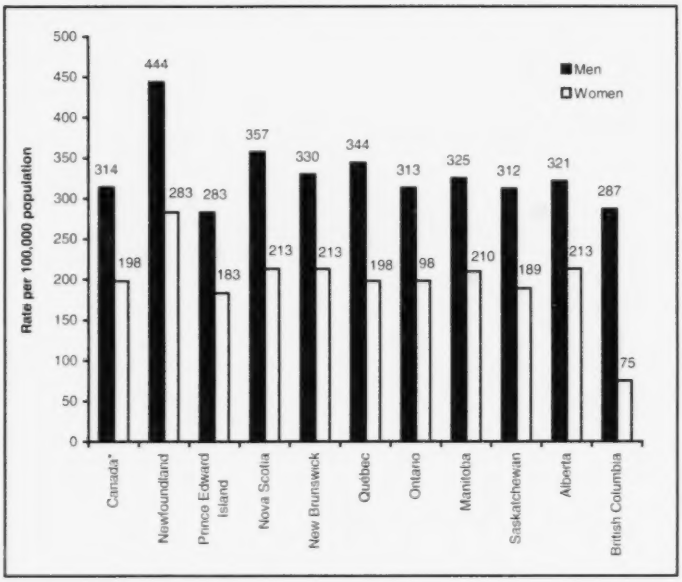
Source: Robert Choinière, Direction de la santé publique de Montréal-Centre, 2000.
www.santepub-mtl.qc.ca

The same findings also apply to women, but the gaps in mortality rates are smaller and have decreased significantly between the 1986-1988 and 1995-1997 periods.

Québec women have the same cardiovascular disease mortality rate as other Canadian women

Despite the spectacular decline in cardiovascular disease mortality over the last two decades, there are still marked differences between the various Canadian regions. The mortality rate for Québec men is higher than the Canadian rate, and ranks third behind Newfoundland and Nova Scotia which have the highest rates. The mortality rate for Québec women is equivalent to the average rate in the rest of Canada.

Comparative Cardiovascular Disease Mortality Rates, per 100,000 Population, by Canadian Province, 1997



* Excluding Québec.

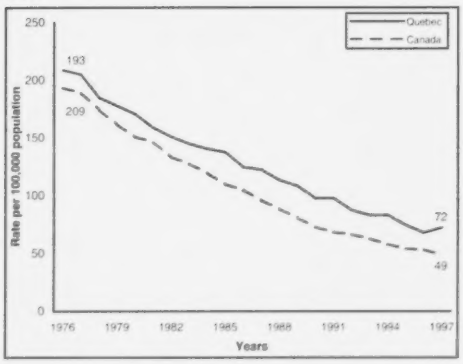
Source: Statistics Canada, compiled by Bureau of Surveillance and Field Epidemiology, February 2000.

Two different realities are hidden behind the observations of overall cardiovascular disease mortality: for both men and women, there is a good performance in cerebrovascular disease which is cancelled out by a poorer performance in death rates from ischemic heart disease. The poor performance related to deaths from ischemic heart diseases (heart failure and myocardial infarction) is attributable to deaths from heart attack at a younger age in Québec.

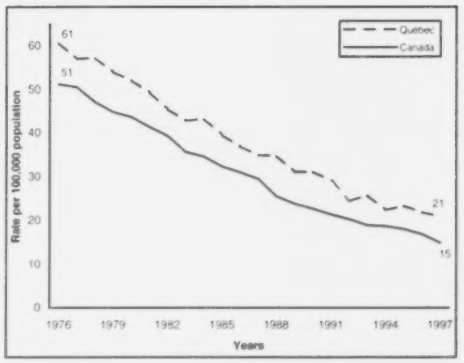
The graph on the trend of myocardial infarction mortality before age 70 aptly illustrates the excess mortality of Quebeckers compared to other Canadians. However, the most worrying fact is that this excess mortality has been increasing since 1976 for men. For Québec women, there is also excess mortality compared with other Canadian women, but this gap has been narrowing in recent years.

Changes in Myocardial Infarction Mortality Rate Among People Aged 25-69, 1976 to 1997

Men



Women



Source: Statistics Canada (unpublished data), compiled by Bureau of Surveillance and Field Epidemiology, February 2000.

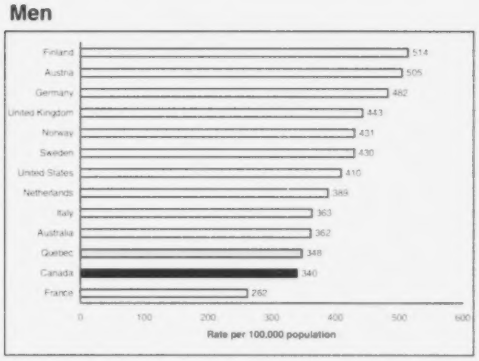
Québec has one of the lowest rates of cardiovascular disease mortality among all industrialized countries

The enormous gains made in cardiovascular disease mortality over the last two decades translate into top performance in Québec compared with other industrialized countries. For both men and women, all ages combined, Québec has the lowest mortality rates behind France and Canada. Comparisons with industrialized countries by specific cause show that Québec has the lowest mortality rates for cerebrovascular disease for both sexes. However, it ranks fourth and fifth for men and women respectively for ischemic heart disease mortality.

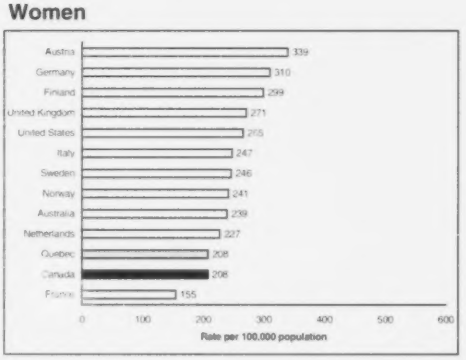
Comparative Mortality Rates by Selected Industrialized Countries, 1995

Cardiovascular disease

Men

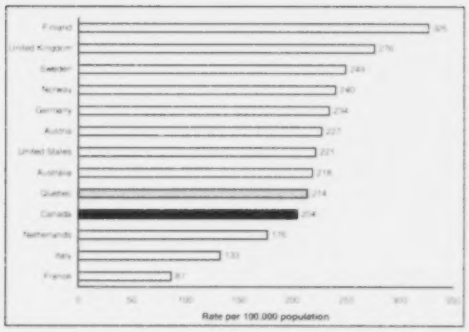


Women

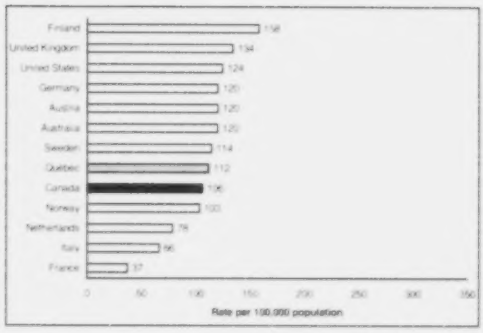


Ischemic heart disease

Men

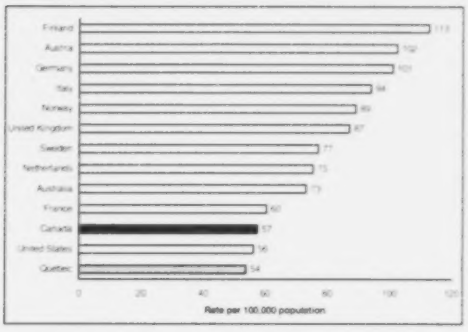


Women

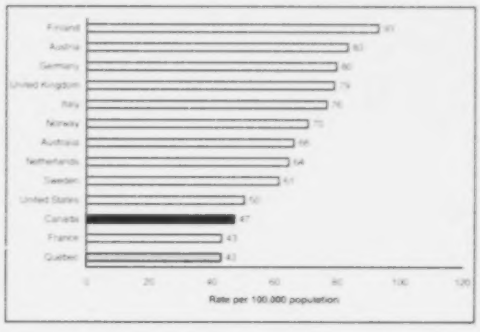


Cerebrovascular disease

Men



Women



Source: World Health Organisation, compiled by Bureau of Surveillance and Field Epidemiology, February 2000.

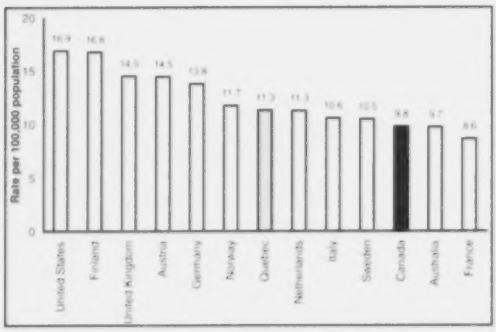
Québec men and women die prematurely from cardiovascular disease

A completely different picture of cardiovascular disease mortality emerges from the analysis of potential years of life lost (PYLL). Although on the whole, for all age groups, Québec has the third best male mortality rate for cardiovascular disease, its performance in terms of potential years of life lost before age 70 is poor. In fact, Québec men lose 11.3 potential years of life per 1,000 population due to cardiovascular disease whereas French men lose only 8.6 years. The correlation of the rate of PYLL with the mortality rate means that Quebeckers die younger from heart disease, and their mortality rates for older ages are better. This situation is probably due to gains made in secondary and tertiary care. However, premature death rates show that substantial gains can be made in the field of health promotion and primary prevention with youth and adults, especially men.

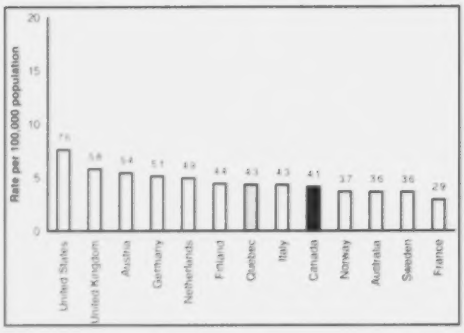
Comparative Rates of PYLL Before Age 70, by Selected Industrialized Countries, 1995

Cardiovascular disease

Men

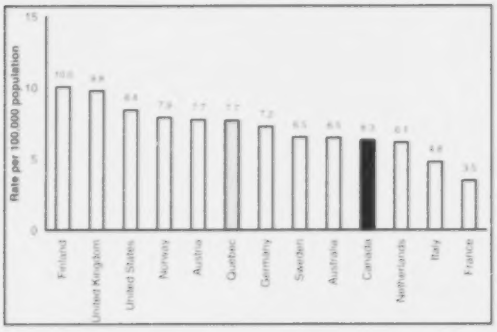


Women

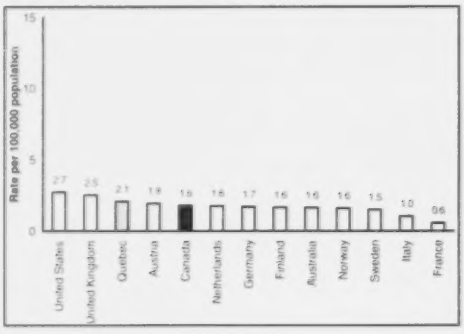


Ischemic heart disease (myocardial infarction and heart failure)

Men



Women



Source: World Health Organisation, compiled by Bureau of Surveillance and Field Epidemiology, February 2000.

The situation of Québec women is similar to that of men. Québec women lose 4.3 potential years of life due to cardiovascular diseases, putting them in seventh position.

If only deaths from myocardial infarction and heart failure are taken into account, Québec women's performance is poorer than that of women in other industrialized countries. Québec women rank eleventh, with a rate comparable to that of Austrian women, and only women in the United States and United Kingdom have higher rates of PYLL. Québec men hold more or less the same unenviable position for both potential years of life lost and mortality rate for myocardial infarction and heart failure.

Cancer

The number of new cases of cancer has been growing steadily, a reflection of population growth and aging

In 1999, the number of new cases of cancer in the Québec population was estimated at 31,800, 52% of which were among men. This represents an increase of 20% since 1990 when there was an estimated 26,587 cases. Since cancer is a disease that primarily affects older people, the number of new cases of cancer should continue to increase over the coming years. This increase is estimated at 3% annually.

For both sexes, over 50% of new cases of cancer are attributed to three types in particular, that is, lung cancer, prostate cancer, and colorectal cancer for men, and breast cancer, lung cancer, and colorectal cancer for women. In 2000, it is estimated that for men, there will be 4,000 new cases of lung cancer, 3,300 new cases of prostate cancer and 2,300 new cases of colorectal cancer. For women, it is estimated that there will be 4,500 new cases of breast cancer, 2,100 of colorectal cancer, and 1,950 new cases of lung cancer.

In 1997, cancer in its many forms was the second leading cause of death in Québec, accounting for 15,923 deaths, that is, 8,675 males and 7,248 females. Mortality rates for malignant tumours were more or less the same in 1997 as in 1976. This apparent stability in fact conceals the combination of two opposing trends: increasing risk of death from lung cancer and decreasing risk of death from other forms of cancer. However, it should not be concluded that there were no fluctuations during the targeted period. Thus, from 1976 to the early 1990s, cancer mortality rates first increased, then declined, and finally returned to a rate comparable to that of 1976.

The many forms of cancer entail more than 600,000 hospital days per year, a third of which involve adults aged 45 to 64

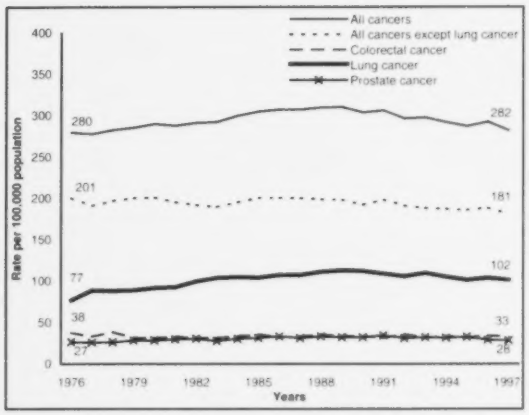
Although more older people are affected by cancer, one third of total hospital days to treat a cancer involve adults aged 45 to 64 (34%).

Lung cancer now kills more women than breast cancer

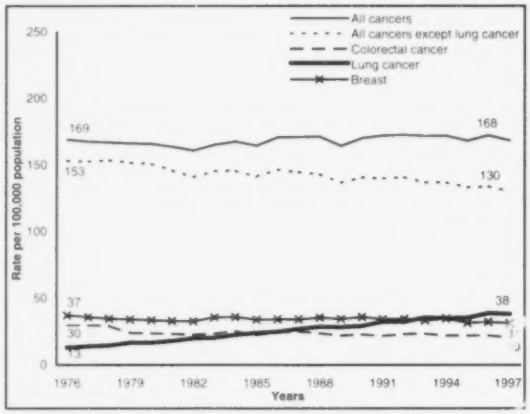
Since 1993, lung cancer has become the cancer that kills the most women, exceeding breast cancer. In 1997, there were 1,592 deaths related to lung cancer. The mortality rate for lung cancer among women has increased by nearly 200% in twenty years, from 13.1 per 100,000 population in 1976 to 38.4 in 1997. During the same period, progress was made in the fight against breast cancer, as the mortality rate for breast cancer declined from 37.2 per 100,000 women in 1976 to 31.4 in 1997, or a decline of 16%, while its incidence rate has increased. Colorectal cancer mortality among women also declined from 1976 to 1997.

Changes in Comparative Cancer Mortality Rate, Québec, 1976-1997

Men



Women



Source: Direction générale de la santé publique, Surveillance de la mortalité au Québec, 1976-1997

Increase in death rate for lung cancer but decline for other forms of cancer

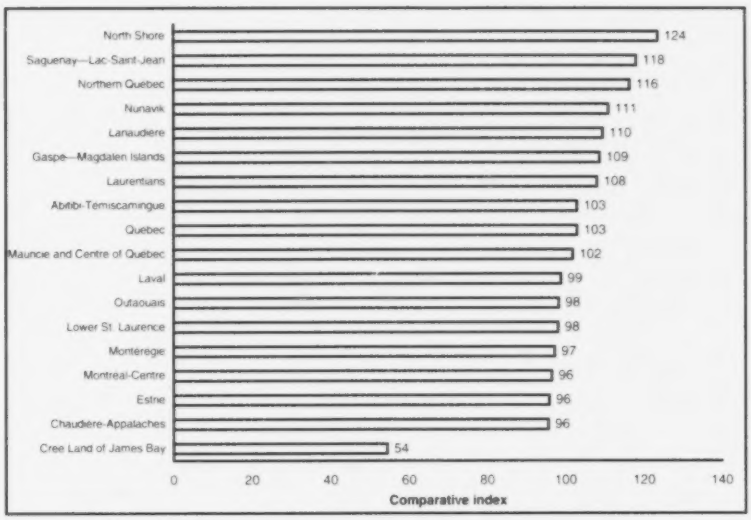
Among men, lung cancer (trachea, bronchi and lungs) is the leading cause of death, accounting for 3,203 deaths in 1997. From 1976 to 1990, the mortality rate for lung cancer increased and then slowly declined.

However, the death rate attributed to other forms of cancer has decreased by 10% for men and 15% for women. The risk of dying from stomach cancer has also decreased, probably due to dietary changes. As for women, over the last two decades, gains have also been made for men in colorectal cancer mortality. However, there has been very little change in prostate cancer mortality, even though its incidence is rising.

For men, the North Shore, Saguenay—Lac-Saint-Jean, Lanaudière, Gaspé—Magdalen Islands, the Laurentians and Abitibi-Témiscamingue record mortality rates for malignant tumours that are significantly higher than the Québec average index.

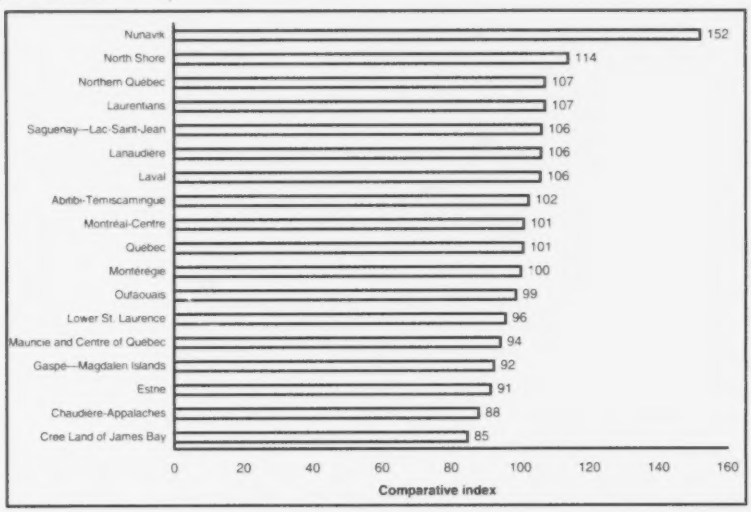
For women, the North Shore, the Laurentians, Saguenay—Lac-Saint-Jean, Lanaudière and Laval record mortality rates for malignant tumours that are significantly higher than the Québec average.

Index of Malignant Tumour Mortality Among Men, by Health and Social Service Region, Québec, 1993-1997
(all of Québec = 100)



Source: Direction générale de la santé publique, Surveillance de la mortalité au Québec, 1976-1997.

Index of Malignant Tumour Mortality Among Women, by Health and Social Service Region, Québec, 1993-1997
(all of Québec = 100)



Source: Direction générale de la santé publique, Surveillance de la mortalité au Québec, 1976-1997.

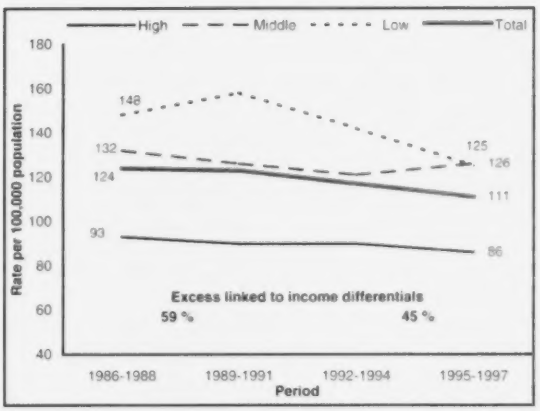
Lung cancer mortality rates are higher among low-income Quebeckers

Analyses conducted in the Montréal-Centre region on income differentials and health show the variations in lung cancer mortality according to income level, for both women and men. Men in the bottom third income group have distinctly higher mortality rates than those recorded for men in the high-income bracket. The excess linked to income differentials between the bottom third and the top third was 45% for the 1995-1997 period, whereas it was 59% for the 1986-1988 period. Variations were also observed for women

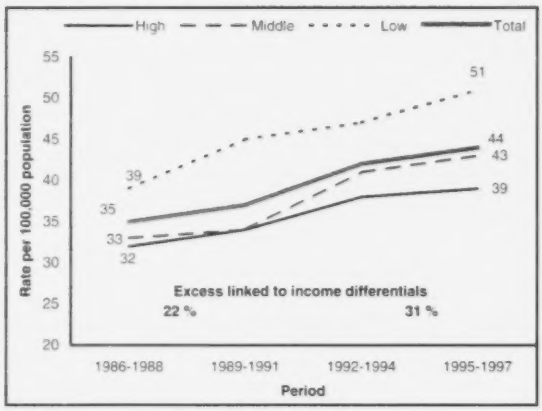
but the gaps were less wide than for men. The excess linked to income differentials was 31% for the 1995-1997 period whereas it was 22% in 1986-1988. Contrary to what was observed for men, the gap between the rates recorded for women in the low-income bracket and those observed in the high-income population is widening. This situation is all the more worrying as it is known that lung cancer among Québec women is increasing rapidly.

Comparative Rates of Lung Cancer Mortality
Based on Income Thirds, Montréal-Centre, 1986-1997

Men



Women



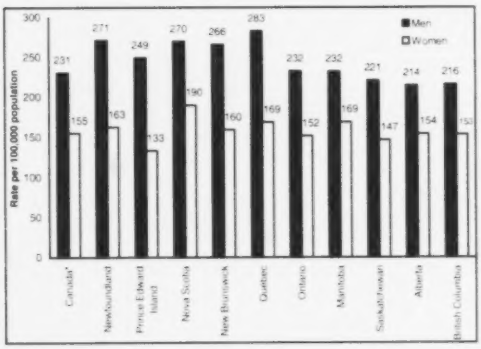
Source: Robert Choinière. Direction de la santé publique de Montréal-Centre. 2000
www.santepub-mtl.qc.ca

Proportionately more men in Québec die prematurely from cancer than elsewhere in Canada

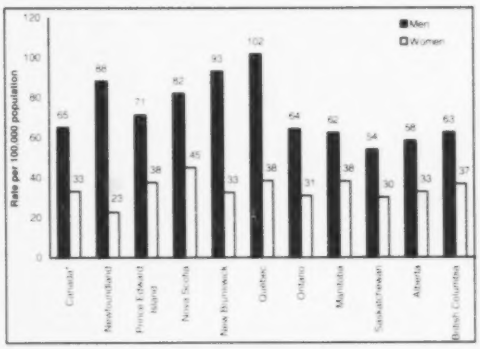
The risk of dying from cancer is higher for Québec men than for men in all the other Canadian provinces (22% higher than the Canadian average). Only women in Nova Scotia have a higher mortality rate than Québec women. These poor performances for Québec men and women are explained by excess mortality from lung cancer and colorectal cancer. However, Quebeckers' substantial excess mortality, that is, 57% higher than the average of the other Canadian provinces, is more due to lung cancer mortality. In Saskatchewan where the smoking rate has been lower for many years, the mortality rate is twice lower than that of Québec (54 per 100,000 population).

Comparative Mortality Rates, per 100,000 Population, by Canadian Province, 1997

All forms of cancer



Cancer of the trachea, bronchi and lung

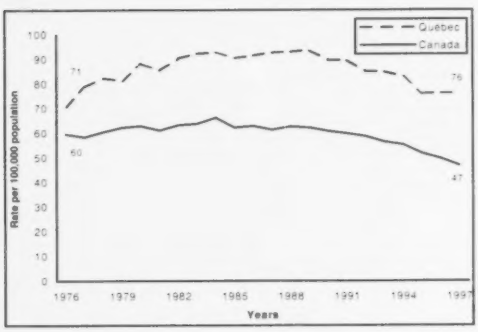


Source: Statistics Canada, compiled by Bureau of Surveillance and Field Epidemiology, February 2000

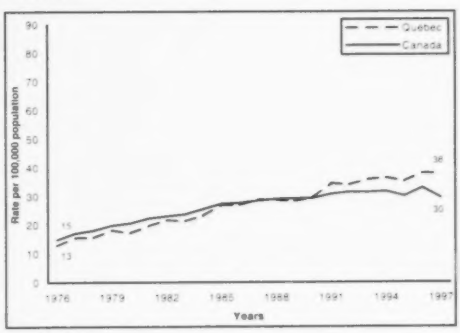
The graphs on changes in mortality rates for lung cancer among persons aged 25-69 show that this excess mortality has remained steady in Québec compared to the rest of Canada. From 1976 to 1997, Québec men consistently had a substantial excess mortality compared to the rest of Canada and this has increased over the years. The situation is different for Québec women who have only been experiencing excess mortality for lung cancer since the early 1990s, compared to other Canadian women. This reflects the more recent increase in smoking among Québec women, as compared with other Canadian women.

Changes in Lung Cancer Mortality Rate Among Persons Aged 25-69, 1976 to 1997

Men



Women

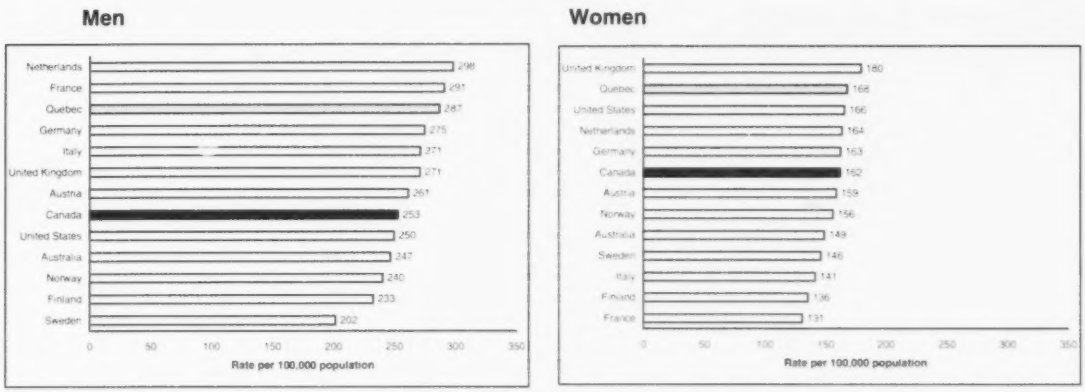


Source: Statistics Canada (unpublished data), compiled by Bureau of Surveillance and Field Epidemiology, February 2000.

Québec's performance in terms of cancer mortality is poor compared to other industrialized countries

Comparison with other industrialized countries reveals the same trend as that resulting from comparison with other Canadian provinces: Québec has very high rates of cancer mortality, among both men and women. This poor performance of Quebeckers for all forms of cancer as a whole is largely due to the very high rates of lung cancer mortality among both sexes.

Comparative Mortality for Malignant Tumours, by Selected Industrialized Countries, 1995

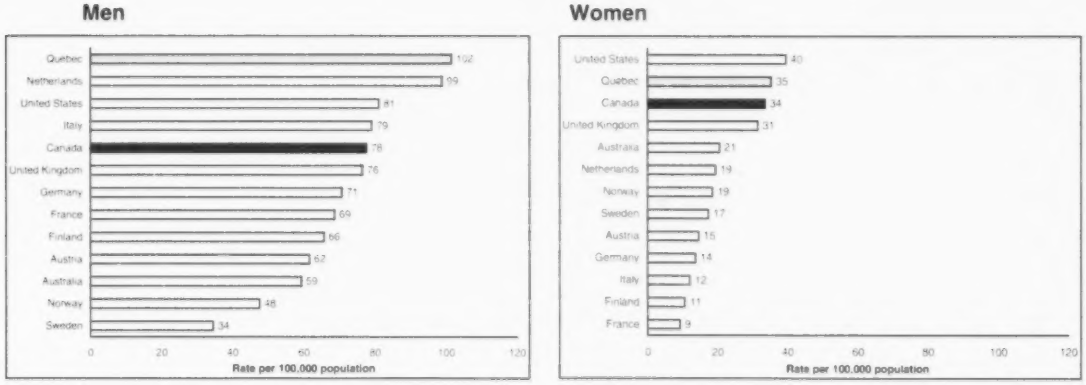


Source: World Health Organisation, compiled by Bureau of Surveillance and Field Epidemiology, February 2000.

Québec women have experienced the highest increase in lung cancer mortality among all industrialized countries

The mortality rate among Québec men is three times higher than that of Swedish men, who have the best rate, while the rate of lung cancer mortality among Québec women is four times higher than that of French women, who have the lowest rate. Moreover, in recent years, the rate of lung cancer mortality among Québec women has increased the most substantially compared to all industrialized countries. Québec women rank first in terms of rates of potential years of life lost associated with lung cancer. Men rank second, behind French men, who are also heavy smokers.

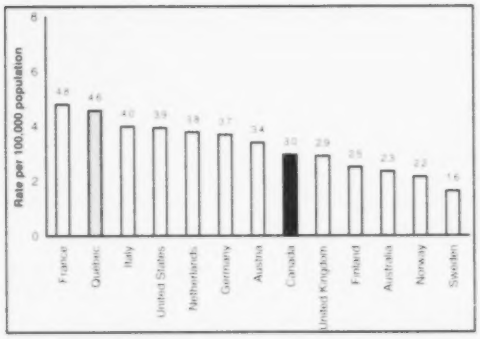
Comparative Mortality Rates for Cancer of the Trachea, Bronchi and Lung, by Selected Industrialized Countries, 1995



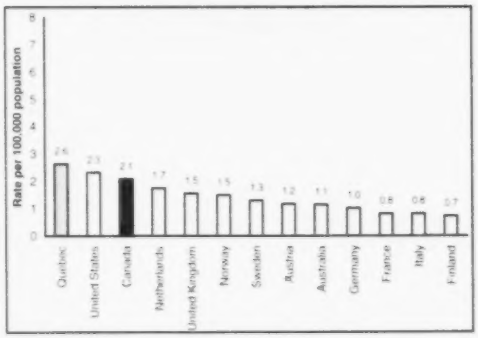
Source: World Health Organisation, compiled by Bureau of Surveillance and Field Epidemiology, February 2000.

Comparative Rates of PYLL Before Age 70,
for Cancer of the Trachea, Bronchi and Lung,
per 100,000 Population, by Selected Industrialized Countries, 1995

Men



Women



Source: World Health Organisation, compiled by Bureau of Surveillance and Field Epidemiology, February 2000

The high rates of lung cancer mortality among men and women and the spectacular increase in this cancer among Québec women are associated with smoking and its development in recent decades. Women began to smoke later than men, which explains the lag in rates between men and women. The increase in lung cancer mortality among women should therefore continue over the coming years. It is doubtful whether there will be a decline in lung cancer mortality among women, as has been observed among men for some years, because of increased smoking among young people since the early 1990s, in particular among young women, and because a great number of women still continue to smoke.

Compared with other countries, for both men and women, the rates of colorectal cancer mortality are also very high among Quebeckers; this situation shows that our diet is low in fibre. Prostate and breast cancer rates among Quebeckers fall within the average for industrialized countries.

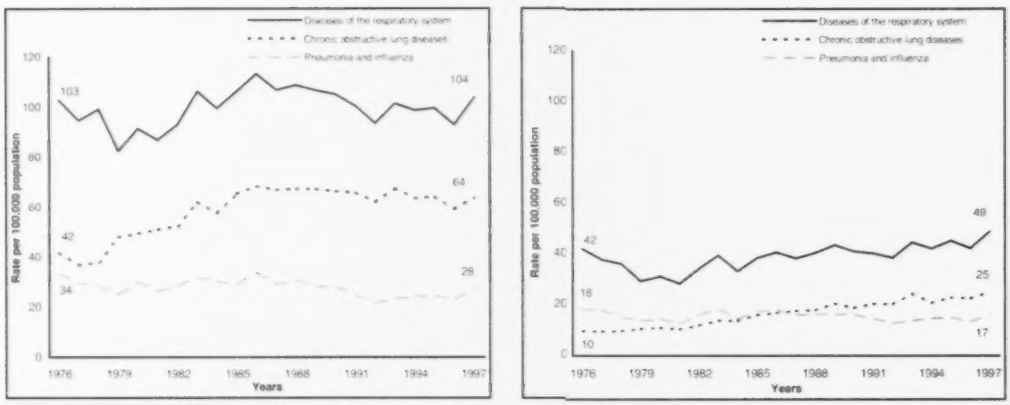
Respiratory Disease

Overall decline in respiratory disease mortality and increase in mortality from bronchitis and emphysema

Diseases of the respiratory system were the third leading cause of mortality with 5,133 deaths in 1997, or a mortality rate of 68.3 per 100,000 population. This rate indicates two opposing trends: the steady increase in chronic obstructive lung disease and the decline, until very recently, in pneumonia and influenza. Among the respiratory diseases, chronic obstructive lung diseases (bronchitis, chronic bronchitis, emphysema and asthma) accounted for the greatest number of deaths, 2,900 in 1997. Mortality rates linked to this cause are 2.5 times higher for men than for women. For the last twenty years, chronic obstructive lung diseases have increased by 52% among men and 150% among women. Among men, the rate rose from 42.0 per 100,000 population in 1976 to 63.8 in 1997 and among women from 9.8 to 24.9. This increase is mainly due to smoking.

Changes in Comparative Mortality Rates for Diseases of the Respiratory System, Québec, 1976-1997

Men **Women**



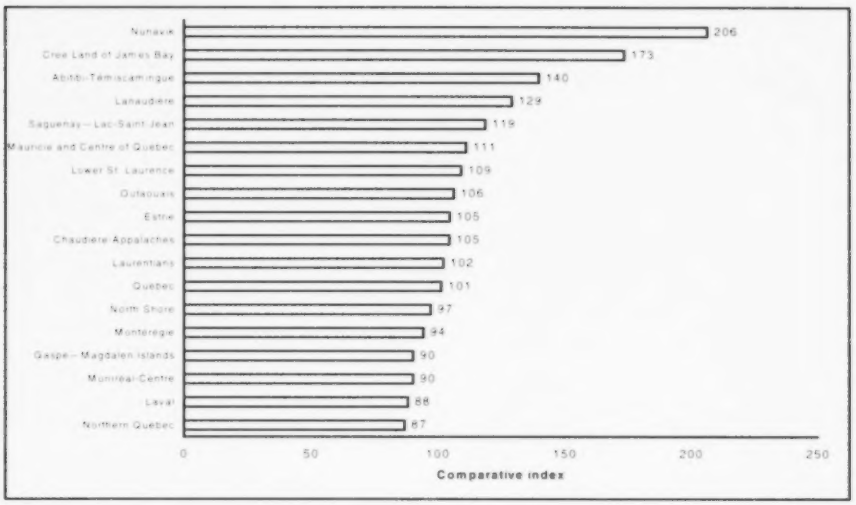
Source: Direction générale de la santé publique, Surveillance de la mortalité au Québec, 1976-1997.

The comparative mortality rates for pneumonia and influenza seem to be on the increase again after having declined as of the late 1980s. This trend is confirmed by the provisional mortality data for 1998. The majority of these deaths occur among people over age 65, but the highest rates are recorded among people aged 85 and over.

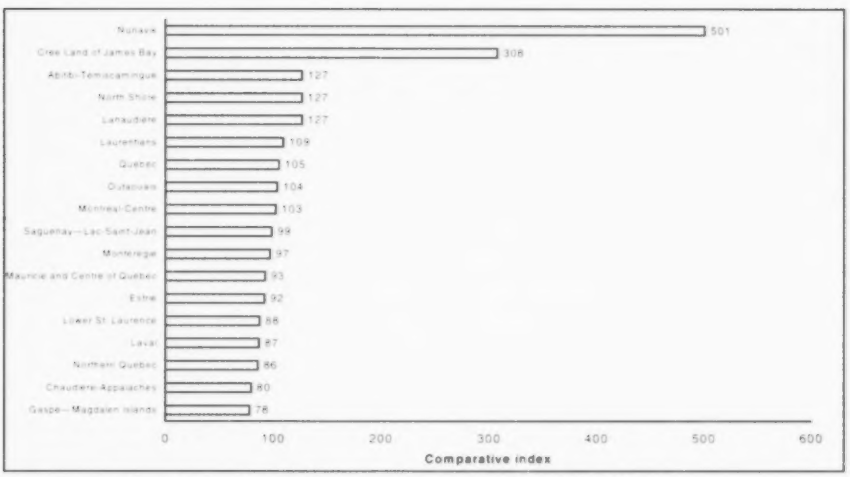
Substantial excess mortality in the Northern Québec regions

An analysis of the regional variations in mortality for diseases of the respiratory system reveals six regions with significant excess mortality among men: Nunavik, Cree Land of James Bay, Abitibi-Témiscamingue, Lanaudière, Saguenay—Lac-Saint-Jean and Mauricie and Centre-of-Québec. Among women, the regions of Nunavik, Cree Land of James Bay, Abitibi-Témiscamingue, North Shore and Lanaudière have mortality indexes that are significantly higher than that of Québec as a whole.

Male Mortality Index for Diseases of the Respiratory System, by Health and Social Service Region, Québec, 1993-1997
(all of Québec = 100)



Female Mortality Index for Diseases of the Respiratory System, by Health and Social Service Region, Québec, 1993-1997
(all of Québec = 100)



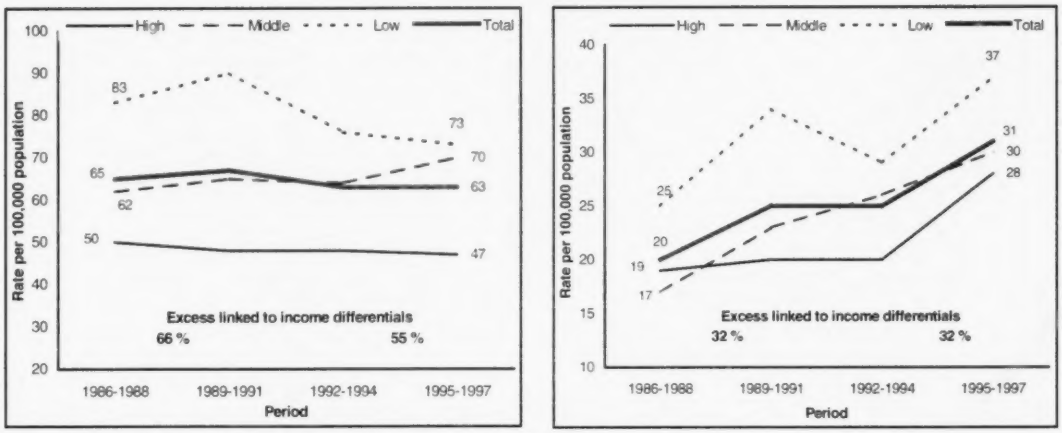
Source: Direction générale de la santé publique. Surveillance de la mortalité au Québec, 1976-1997.

People with low income have mortality rates for diseases of the respiratory system that are distinctly higher than those of the rest of the population

The analysis of socio-economic differences observed in the Montréal-Centre region reveals, as with other mortality causes, the link between income level and mortality from diseases of the respiratory system. In fact, among men, the excess linked to income differentials was 55% between the third of the population with the lowest income and the population with the highest income for the 1995-1997 period. For all the periods examined since 1986, the gaps have remained very wide. Gaps were also observed among women (32% for the 1986-1988 and 1995-1997 periods).

Comparative Mortality Rates for Lung Diseases
Based on Income Thirds, Montréal-Centre, 1986-1997

Men **Women**

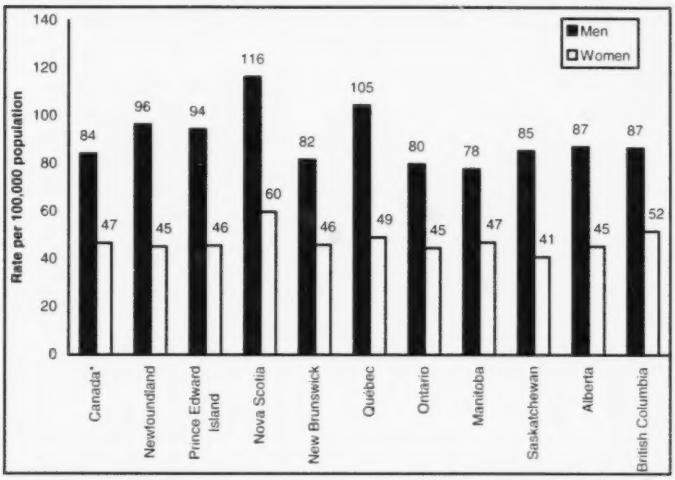


Source: Robert Choinière, Direction de la santé publique de Montréal-Centre, 2000.
www.santepub-mtl.qc.ca

Québec and Nova Scotia have the highest mortality rates for respiratory diseases

As in the case of cancer, Quebeckers have very high mortality for diseases of the respiratory system. Among men, after Nova Scotia, Québec's rates are the highest. Among women, Québec women rank third behind Nova Scotia and British Colombia. This poor performance of Quebeckers in respiratory disease mortality is due to mortality from emphysema, bronchitis and asthma for which Québec has the highest rates in Canada. These results were predictable given that smoking is the principal risk factor for obstructive lung diseases.

Comparative Mortality Rates per 100,000 Population, by Disease of the Respiratory System, by Canadian Province, 1997



* Excluding Québec.
Source: Statistics Canada, compiled by Bureau of Surveillance and Field Epidemiology, February 2000.

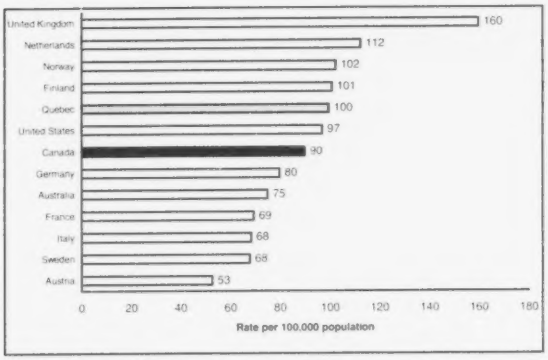
In all industrialized countries, the rate of male respiratory disease mortality is two times higher than that of women

A comparison of Quebeckers' rates of respiratory disease mortality with those of other industrialized countries reveals that Québec men and women have rates that are nearly two times higher than those in Austria, which has the best performance for both sexes. It should be noted that, in the majority of industrialized countries, the male mortality rate for respiratory diseases is two times higher than that of women, which primarily reflects heavier smoking among men over many years.

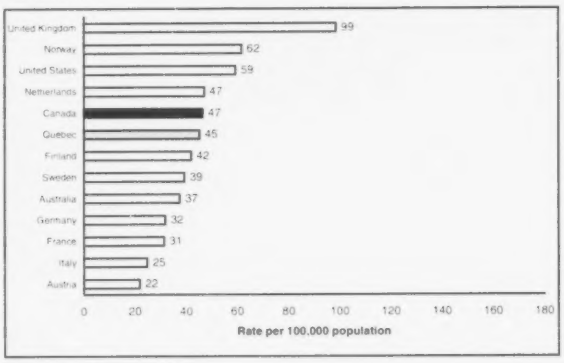
Men in Québec and the Netherlands have the highest rates of chronic obstructive lung diseases. Among women, Australia, the United Kingdom and the United States have higher rates than in Québec, but Québec women's risk of dying from chronic obstructive lung disease is nearly three times higher than that of Finnish women, whose rate is the lowest.

Comparative Mortality Rates for Diseases of the Respiratory System by Selected Industrialized Countries, 1995

Men



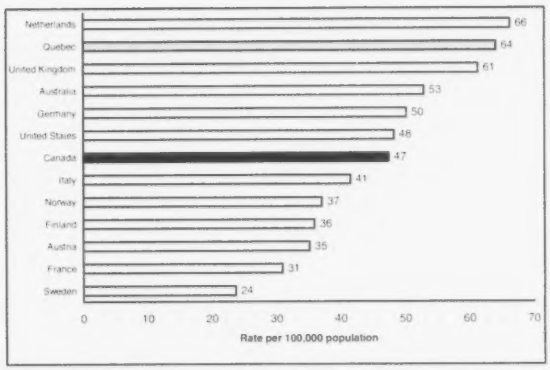
Women



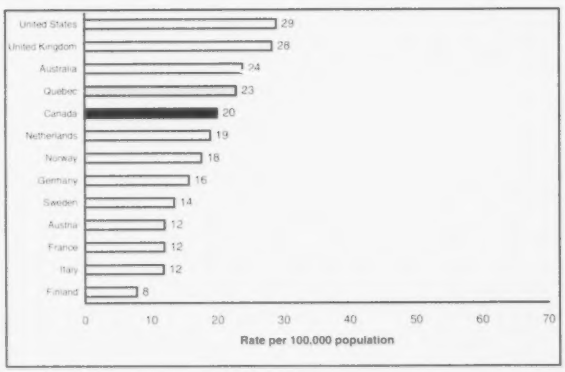
Source: World Health Organisation, compiled by Bureau of Surveillance and Field Epidemiology, February 2000.

Comparative Mortality Rates for Chronic Obstructive Lung Diseases by Selected Industrialized Countries, 1995

Men



Women



Source: World Health Organisation, compiled by Bureau of Surveillance and Field Epidemiology, February 2000.

Injuries And Poisonings

The majority of deaths due to injuries and poisonings occur before age 50

Injuries and poisonings were the cause of 3,536 deaths in 1997, two-thirds of which involved men. Unlike other mortality causes, a high proportion of these deaths occur before the age of 50.

Poisonings and injuries entail more than 380,000 hospital days per year

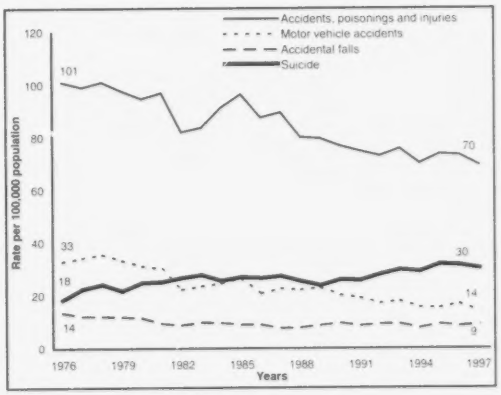
Out of the total hospital days associated with poisonings and injuries (390,000) in 1998, approximately one third involved women aged 75 and over (28%), often as a result of loss of balance due to medication. The average length of their stay in hospital is 15 days. The number of hospital days for men aged 25 to 64 is also among the highest (23% of hospitalizations). However, unlike seniors, the average length of their stay in hospital is five to six days.

Mortality from motor vehicle accidents has decreased by half while mortality from suicide has increased by just as much

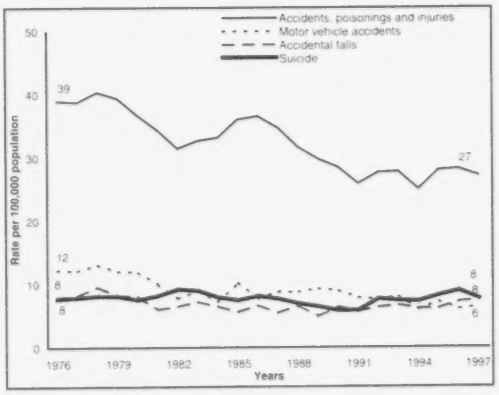
Over the last two decades, mortality rates for injuries and poisonings have decreased by 30%, from 68.8 per 100,000 population in 1976 to 48.0 in 1997. These gains are mainly attributed to the decline in motor vehicle accident mortality which has decreased by half as a result of efforts made in prevention, despite an increase in kilometres travelled and the number of vehicles on the road. However, during the same period, suicide rates increased by nearly 50%, from 12.9 per 100,000 population in 1976 to 18.9 in 1997. This is due to the increase in suicide among men, a rate which rose from 18.5 per 100,000 population in 1976 to 30.4 in 1997, or an increase of nearly 65%. This spectacular increase occurred primarily among men under age 50.

Changes in Comparative Mortality Rates for Injuries and Poisonings, Québec, 1976-1997

Men



Women



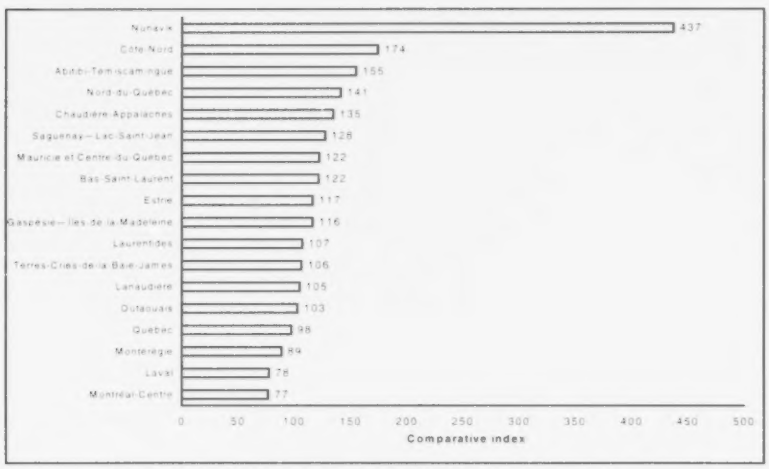
Source: Direction générale de la santé publique. Surveillance de la mortalité au Québec, 1976-1997.

Even though the proportion of deaths from accidental falls is low in relation to all deaths from injuries and poisonings, this mortality cause should be noted because of the age groups that it affects, i.e., mostly people over age 80 who have had a broken hip. From 1976 to the late 1980s, mortality from accidental falls gradually decreased and then has

increased steadily. If the trend continues, and given the increase in the proportion of seniors within the population, this cause of death will become an increasingly important factor in accidental mortality.

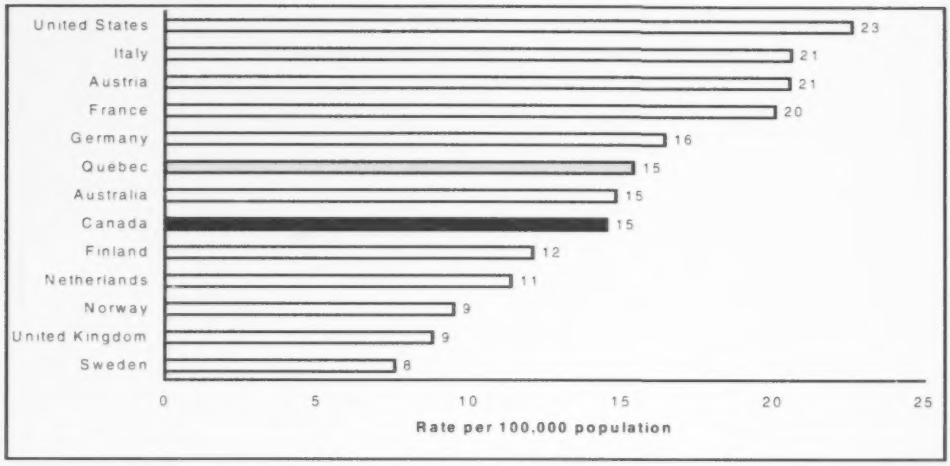
For men, a total of eleven regions record mortality rates from accidents, poisonings and injuries that are significantly higher than that of Québec as a whole: Nunavik, North Shore, Abitibi-Témiscamingue, Chaudière-Appalaches, Saguenay—Lac-Saint-Jean, Mauricie and Centre-of-Québec, Lower St. Lawrence, Estrie, Gaspé—Magdalen Islands, Montérégie and Laval. The Montréal region has the lowest mortality rate for injuries and poisonings.

Mortality Index by Injury and Poisoning,
by Health and Social Service Region, Males, Québec, 1993-1997
(all of Québec = 100)



Source: Direction générale de la santé publique. Surveillance de la mortalité au Québec, 1976-1997.

Mortality Index by Injury and Poisoning,
by Health and Social Service Region, Females, Québec, 1993-1997
(all of Québec = 100)



Source: Direction générale de la santé publique, Surveillance de la mortalité au Québec, 1976-1997

Except for the regions of the Gaspé—Magdalen Islands, the Laurentians and Northern Québec, the male and female mortality rates follow the same trend as that of Québec as a whole.

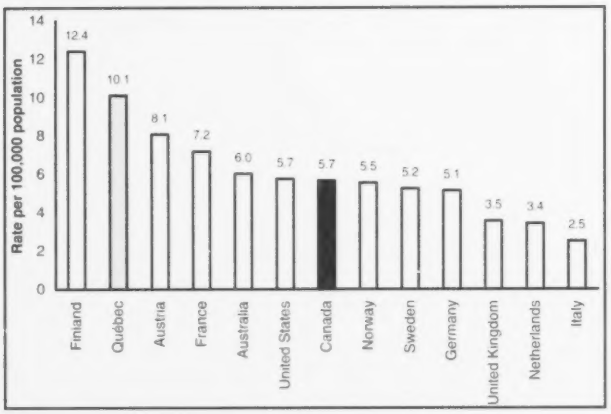
For all injuries and poisonings, mortality rates in Québec are higher than the average observed elsewhere in Canada

Québec still needs to make substantial gains in injury prevention given that mortality rates in Québec are higher than the average observed elsewhere in Canada, among both women (8%) and men (20%). With regard to traffic accidents, where gains have been spectacular over the last two decades, Québec has higher mortality rates than the average observed in the rest of Canada and distinctly higher rates than those in Ontario.

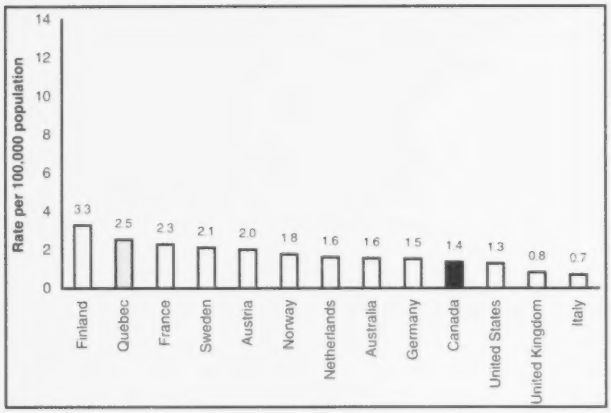
However, the greatest differences with the rest of Canada are in suicide deaths. Suicide mortality rates recorded for men and women are nearly twice as high in Québec as elsewhere in Canada.

Comparative Mortality Rates by Canadian Province, 1997

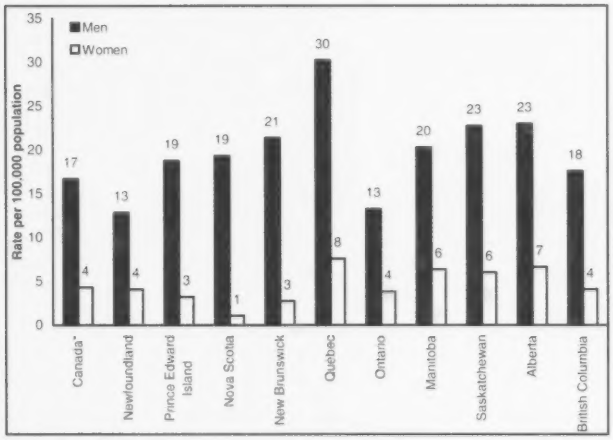
Accidents, poisonings and injuries



Motor vehicle accidents



Suicide



* Excluding Québec.

Source: Statistics Canada, compiled by Bureau of Surveillance and Field Epidemiology, February 2000.

Comparison of mortality rates by specific cause (motor vehicle accidents, suicide, accidental falls) with those of industrialized countries reveals that Québec's performance varies according to the causes. For traffic accidents, the mortality rate for Québec men is within the average of the industrialized countries. However, in terms of potential years of life lost, they have the highest rates among the selected industrialized countries. Québec women have the third highest mortality rates for traffic accidents, behind American and French women. But in terms of potential years of life lost, they rank second, which reflects high mortality among younger women.

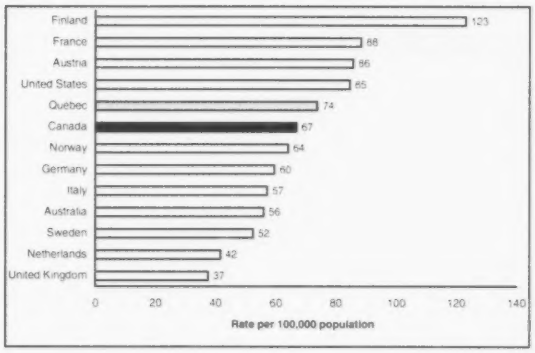
In all the countries, rates for men are twice as high as those for women.

A comparison with selected industrialized countries reveals that, for both men and women, Québec has one of the lowest mortality rates for accidental falls.

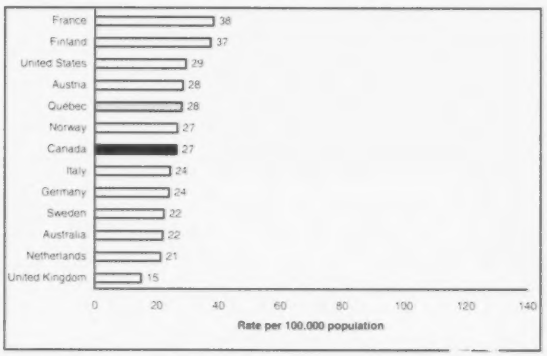
Comparative Mortality Rates, by Selected Industrialized Countries, 1995

All injuries

Men

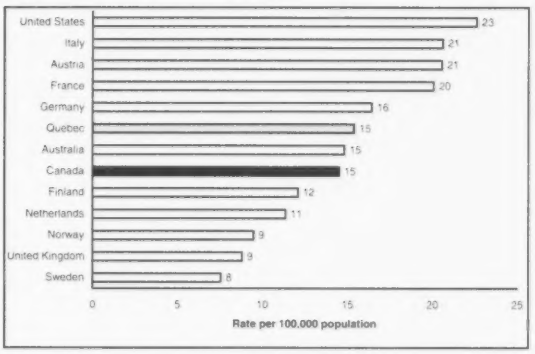


Women

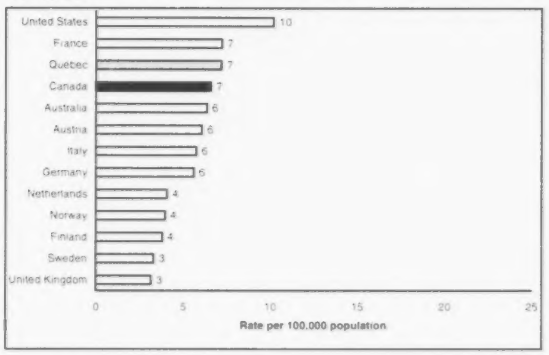


Motor vehicle accidents

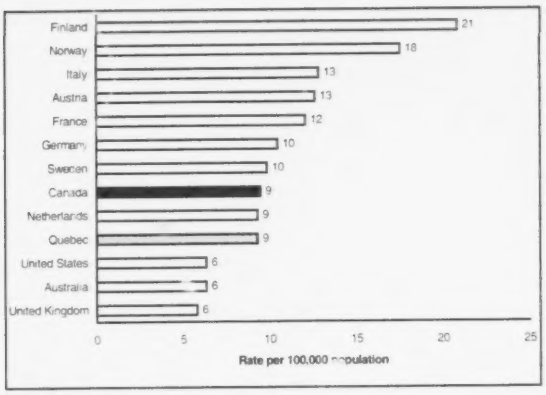
Men



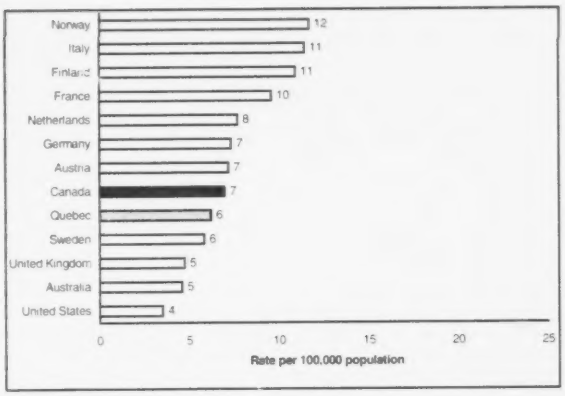
Women



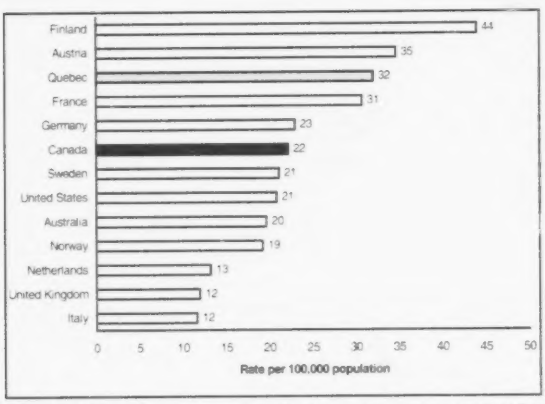
Accidental falls
Men



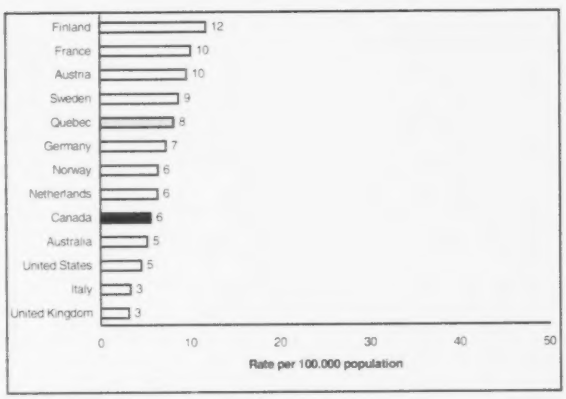
Women



Suicide
Men



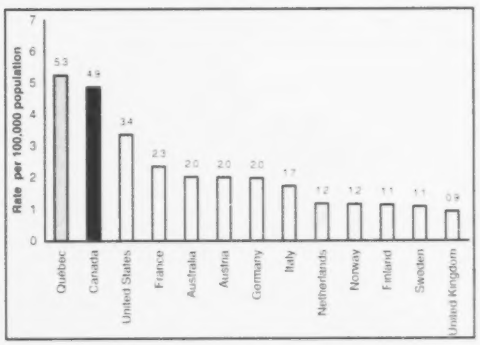
Women



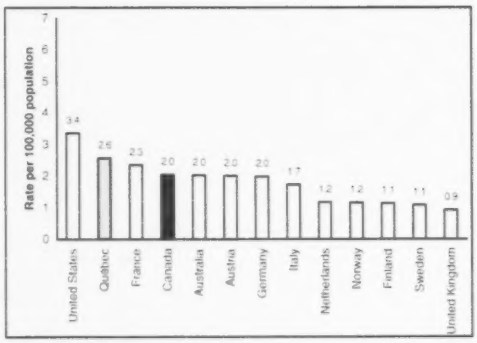
Source: World Health Organisation, compiled by Bureau of Surveillance and Field Epidemiology, February 2000.

Comparative Rates of PYLL Before Age 70, as a Result of Motor Vehicle Accidents, per 100,000 Population, by Selected Industrialized Countries, 1995

Men



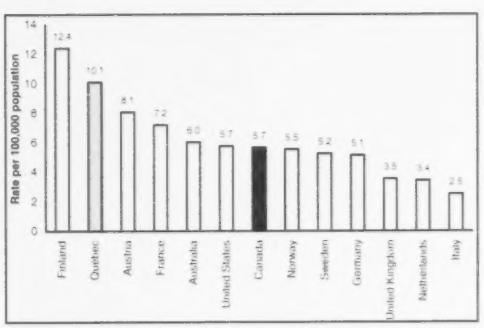
Women



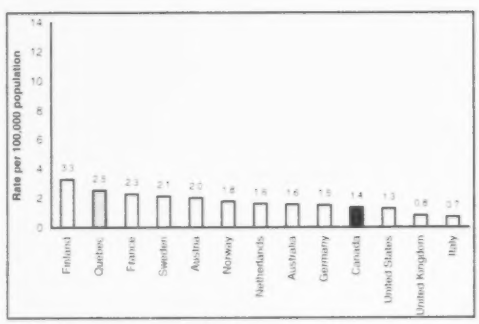
Source: World Health Organisation, compiled by Bureau of Surveillance and Field Epidemiology, February 2000.

Comparative Rates of PYLL Before Age 70, as a Result of Suicide, per 100,000 Population, by Selected Industrialized Countries, 1995

Men



Women



Source: World Health Organisation, compiled by Bureau of Surveillance and Field Epidemiology, February 2000.

Québec has one of the highest suicide rates among industrialized countries

Québec men have one of the highest suicide rates among the industrialized countries. Only Finland and Austria have higher rates than Québec. Among women, Québec has the highest suicide mortality rates, behind Finland, France, Austria and Sweden. However, in terms of potential years of life lost, for both men and women, Québec ranks second behind Finland. Québec women's poor performance in terms of potential years of life lost means that they commit suicide younger compared to women in the other countries. Moreover, in most European countries, suicide rates increase with age, whereas in Québec the highest rates are observed among people under 50.

Implications

Québec has shown major improvements in life expectancy and infant mortality over the last twenty years. However, compared with the industrialized countries and other Canadian provinces, Québec's performance is still unenviable as regards premature deaths related to preventable diseases and injuries.

The wide gap of six to twelve years in life expectancy between socio-economically advantaged and disadvantaged environments as well as between certain regions shows that, for each of the major causes of death, disadvantaged persons have a greater risk of dying prematurely. This finding thus implies that there is a need to address the "common determinants" of this greater risk of dying young, for many Québec men and women. On the other hand, this need to address the common determinants related to living conditions for example, does not minimize the need to reduce the risk factors specific to certain preventable diseases faced by the general population.

It is thus a cause for concern to find out that the more closely a disease is linked to smoking, the greater early mortality is, compared to the industrialized countries and other Canadian provinces. The dramatic increase in smoking-related deaths among women is all the more worrying as fewer women than men are quitting smoking and more than one third of young people now smoke, in particular young women.

It is thus essential to reduce smoking in order to significantly reduce preventable diseases and premature deaths, as well as the burden of chronic diseases which puts pressure on the health care system and undermines the health and survival of many Quebeckers.

The high rate of suicide among men and women in Québec compared to the other Canadian provinces and industrialized countries is of particular concern, all the more so because half of the suicides occur among people under age 50.

Selected Determinants of Health

The Environment and Living Conditions

Aspects of the physical, social and economic environment influence the lifestyle of communities and the individuals therein. These factors that are themselves subject to changes have an impact on health.

The major and rapid social, economic, technological and environmental changes that are becoming more and more pronounced influence both the composition of families and living environments, access to work and characteristics of the work environment, as well as the social, ecological and economic environments. These numerous, rapid changes are all conditions that require individuals and families to be able to adjust constantly and that influence their health directly or indirectly. An example is the increase, in Québec and in other industrialized countries, in the number of persons who report having an asthma problem and in the number of hospitalizations and deaths due to this environment-related disease.

Differences in living conditions are the cause of the high proportion of health inequities between different population groups, which has already been referred to in this portrait of the health of Quebeckers. All of these factors, and especially their combined effect, influence the risk of developing an illness or being injured. They also affect the probability of getting better or recovering from an illness or injury without after-effects and, in the same way, aggravate health status.

Public policies and the decisions made in all sectors of society therefore influence the probability of Quebeckers growing up and aging in good health and thus, their capacity to contribute to Québec's social and economic development.

The old saying "It's the first 6 years that count" is still particularly relevant to the capacity to grow up healthy. For example, during pregnancy and the early years of life, the nerve networks of the brain finish developing and these affect the capacity to learn and adapt. Living conditions and nutrition, as well as early childhood experiences, leave marks that influence the physical, psychological and social functioning of tomorrow's adults.

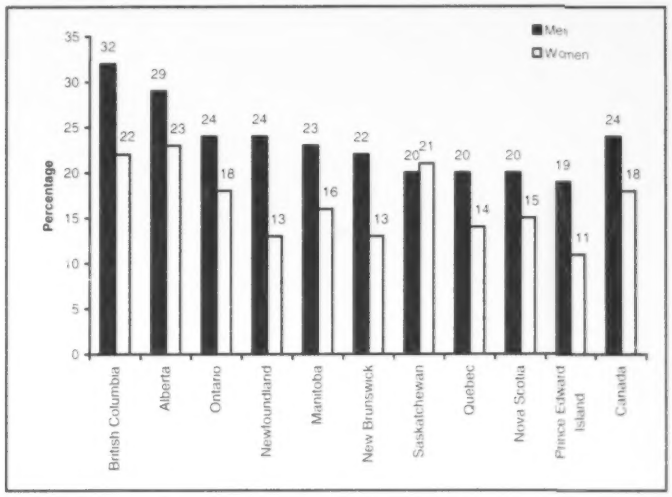
Lifestyle

Physical Activity

Physical activity is a major determinant of health status. The regular practice of a moderate physical activity helps to improve mood and self-esteem and to reduce early death, obesity, hypertension, cardiovascular disease, diabetes and osteoporosis.

According to the 1996-1997 National Population Health Survey conducted in all of Canada, men were more active than women (24% vs. 18%).

Frequency of Physical Activities, by Province and Sex, 12 years+, Canada, 1996-1997



Source: National Population Health Survey, 2nd cycle, 1996-1997

Men in Québec (20%), Nova Scotia (20%) and Prince Edward Island (19%) have the three lowest rates of leisure-time physical activity of all the provinces in Canada. Among women, Québec (14%) ranks fourth, behind Prince Edward Island, New Brunswick and Newfoundland. The western provinces and Ontario have the highest number of persons aged 12 and over who are physically active enough during leisure time to reap health benefits.

Comparison of the frequency of physical activities in Québec with the Canadian average shows that a lower proportion of Quebeckers of both sexes practise leisure-time physical activities. This is cause for concern because the risks associated with lack of exercise will probably increase, given the observed trend toward sedentary behaviour in all industrialized countries. It is likely that the low percentage of Quebeckers who are truly physically active is already having an impact on the prevalence of numerous diseases.

Excess Weight

Being overweight is linked to early death. In fact, obesity increases the risk of early death and disease, which is linked in particular to cardiovascular disease, certain forms of cancer and several non-fatal but debilitating diseases which have negative effects on quality of life and aggravate certain health problems. These diseases are mainly cardiovascular disease, hypertension, stroke, diabetes mellitus, joint disease and some forms of cancer. Being overweight generally results from lack of physical activity combined with excess calories due to a diet that is too high in fat and sugar.

Body Mass Index (BMI)*, by Age, Sex (age standardized) and Province, Age 20-64, Canada, 1996-1997

Province	Insufficient weight BMI < 20	Acceptable weight BMI = 20 to 24.9	Some excess weight BMI = 25 to 26.9	Overweight BMI = 27+
	%	%	%	%
Newfoundland	#	39	18	39
Prince Edward Island	5	36	21	37
Nova Scotia	6	38	18	38
New Brunswick	5	34	19	42
Québec	10	45	18	27
Ontario	9	44	19	29
Manitoba	6	40	19	35
Saskatchewan	5	36	23	36
Alberta	8	43	20	30
British Columbia	8	47	19	27

* BMI calculated as Weight (kg)/Squared height (meters).
# Data omitted because of high sampling variability.

Source: Statistics Canada, National Population Health Survey, 1996-1997, special tabulations.

The results of the most recent population health survey by Statistics Canada reveal that the weight of 45% of Quebeckers aged 20 to 64 is above the acceptable level. Despite this very high percentage, of all the provinces in Canada, Québec has the lowest proportion of persons whose weight is above the acceptable level. The fact that a lower proportion of Quebeckers are overweight compared to residents of the other provinces is probably related to the fact that Quebeckers are more concerned about dietary fat and fibre and are taking more action in this regard than are other Canadians.

Concern About Fat and Fibre, by Sex and Province, Age 12+, Canada, 1994-1995

Province	Dietary fat	Dietary starch and fibre
	Concerned and taking action	Concerned and taking action
	%	%
Newfoundland	59	23
Prince Edward Island	54	24
Nova Scotia	60	24
New Brunswick	56	24
Québec	61	27
Ontario	57	26
Manitoba	58	24
Saskatchewan	53	21
Alberta	59	26
British Columbia	61	26

Source: Statistics Canada, National Population Health Survey, 1994-1995 (Supplement, special tabulations).

Alcohol Consumption

High alcohol consumption increases the risk of cirrhosis, certain forms of cancer, hypertension, strokes and birth defects. In addition, it is known that excessive use of alcohol increases the risks of family, professional and social problems and that it is responsible for a high proportion of traffic accidents, industrial accidents, family violence and other injuries.

Type of Alcohol Drinker and Quantity of Alcohol Consumed per Week, by Age, Sex and Province, Age 12+, Canada, 1996-1997

Province	Type of drinker		Number of drinks per week*			
	Regular	Abstainer	< 1	1-6	7-13	14 and +
			%			
Newfoundland	48	14	28	44	16	11
Prince Edward Island	44	11	33	40	17	10
Nova Scotia	47	13	36	36	17	12
New Brunswick	42	13	38	38	13	10
Québec	57	10	32	45	14	9
Ontario	52	14	34	41	16	9
Manitoba	52	13	32	41	17	11
Saskatchewan	54	10	32	45	14	8
Alberta	52	13	32	44	16	9
British Columbia	56	9	26	46	18	10

* Percentage of regular drinkers (persons who consume one or more drinks per month).

Source: Statistics Canada, National Population Health Survey, 1996-1997, special tabulations.

According to the National Population Health Survey, Québec has the highest number of regular drinkers, that is, 57% of the population aged 12 and over, compared to an average

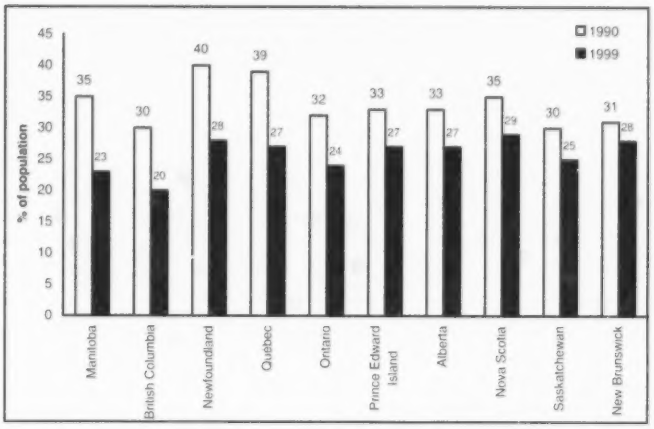
of 53% for Canada as a whole. However, after Saskatchewan, Québec, Ontario and Alberta have the lowest number of persons who consume more than 14 drinks per week.

Tobacco Use

Smoking is the risk factor known to contribute to the greatest number of preventable diseases. According to the World Health Organization, 50% of persons who smoke regularly will die as a result of problems related to the consumption of tobacco products and half of them will die before the age of 70. Smoking doubles the risk of heart attack but this additional risk is greatly reduced during the year that follows giving up smoking. Smoking is also the cause of numerous forms of cancer (90% of lung cancer cases) and numerous respiratory diseases. It increases the risk of low birth weight, sudden infant death, allergies and other health problems.

In 1999, it was estimated that 27% of Quebeckers smoke cigarettes. According to data from the Tobacco Use Monitoring Survey, this represents a decrease of 31% from 1990 when 39% of Quebeckers reported smoking cigarettes. However, this decrease conceals two different realities: an overall decline in the smoking rate for the population aged 15 and over, but a sharp increase in the smoking rate for youth aged 15 to 19. It is estimated that 36% of youth aged 15 to 19 are smokers, compared to 27% for the population aged 15 and over.

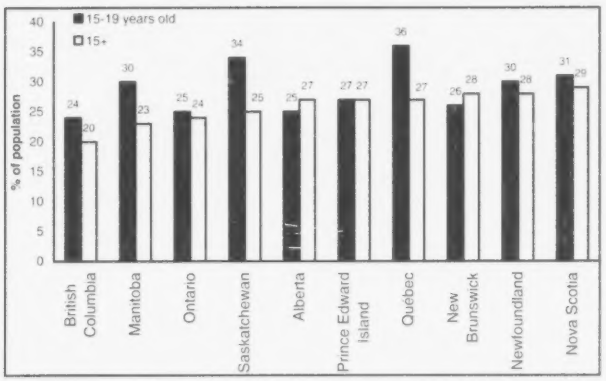
Percentage of Men and Women Who Smoke, by Province, Age 15+, Canada, 1990 and 1999



Source : Health Promotion Survey 1990 and Canadian Tobacco Use Monitoring Survey, Phase 1, 1999.

According to the survey findings, 35% of young smokers started smoking by the age of 12 and 80% had already experimented with cigarettes by the age of 14. Among young smokers aged 15 to 17, 66 % were already daily smokers.

Percentage of Men and Women Who Smoke, by Province, Age 15-19 and 15+, Canada, 1999



Source : Canadian Tobacco Use Monitoring Survey, Phase 1, 1999

Comparison of tobacco use in Québec with that in the rest of Canada shows that the proportion of young smokers is slightly higher in Québec than in Canada as a whole. Québec has the highest proportion of young smokers aged 15 to 19 among all provinces.

Based on a Québec survey of secondary school students, it is estimated that 20% of youth in this age group are smokers while another 11% have been introduced to tobacco or experimented with it. At the secondary school level, smoking rates for girls are significantly higher than for boys (23% vs. 17%). Among girls, the smoking rate increases markedly between the secondary 1 and 2 levels (10% to 22%). Among boys, this increase occurs gradually between the secondary 1 and 3 levels.

Category of Smokers by School Year

		Non-smokers				Current smokers			
	Pe	Never smoked	Former experimenters	Former smokers	Total (1)	Beginner	Occasional	Daily	Total (2)
	'000		%				%		
Total	**443**	**48.0**	**18.6**	**3.0**	**69.6**	**10.5**	**7.9**	**12.0**	**19.9**
Secondary 1	99	65.5	12.4	0.5**	78.4	12.0	4.3*	5.3	9.6
Secondary 2	91	52.9	16.2	1.7**	70.8	12.0	7.2	10.0	17.2
Secondary 3	89	41.9	19.2	4.1	65.2	11.1	8.3	15.3	23.7
Secondary 4	78	42.2	22.5	4.1*	68.8	9.1	7.9	14.2*	22.1*
Secondary 5	85	33.8	24.3	5.4*	63.5	7.8*	12.2	16.5	28.7

(1) All non-smokers, that is persons who have never smoked, non-smokers who have experimented with tobacco and former smokers
(2) All persons who currently smoke, that is, occasional and daily smokers.
* Coefficient of variation between 15% and 25% : should be interpreted with caution.
** Coefficient of variation above 25% : imprecise estimate given for information only.

Source: Institut de la statistique du Québec. Enquête québécoise sur le tabagisme chez les élèves du secondaire, 1998.

The results of the Québec survey on tobacco use among secondary students and the Tobacco Use Monitoring Survey indicate that young people are being introduced to tobacco at an increasingly earlier age.

Category of Smokers

		Non-smokers				Current smokers			
	Pe	Never smoked	Former experimenters	Former smokers	Total (1)	Beginner	Occasional	Daily	Total (2)
	'000		%				%		
Total	**443**	**48.0**	**18.6**	**3.0**	**69.6**	**10.5**	**7.9**	**12.0**	**19.9**
Boys	225	50.8	19.3	3.2	73.2	9.5	6.7	10.6	17.3
Girls	218	45.1	17.9	2.9	65.9	11.6	9.1	13.5	22.5

(1) All non-smokers, that is persons who have never smoked, non-smokers who have experimented with tobacco and former smokers.
(2) All persons who currently smoke, that is, occasional and daily smokers.

Source: Institut de la statistique du Québec, Enquête québécoise sur le tabagisme chez les élèves du secondaire, 1998.

Implications

It is clear from the literature that the physical, social and economic environment as well as lifestyle and living context have a crucial impact on health. Of course, many advances have been made in recent years as a result of changes in behaviour linked to certain health determinants. The 50% reduction in road traffic accidents can be attributed to the increased use of seatbelts and decrease in drunk driving. Canadian comparisons show that Quebeckers are more concerned about their diet than other Canadians and that a slightly lower proportion of Quebeckers are overweight.

However, comparative data also show that in Québec and Newfoundland smoking rates are unfortunately the highest and tobacco use is higher among youth than the rest of the population. Also, Québec statistics on lung cancer, chronic obstructive lung disease and heart attack clearly illustrate the effects of this high rate of smoking by Quebeckers. This situation will persist unless significant measures are taken to decrease smoking rates, particularly among youth.

One finding to emerge from all the data on health determinants is that young people do not necessarily have good health practices when it comes to smoking and physical exercise. These results are cause for concern, especially since we know that youth may well be mortgaging their health due to poor personal health practices, reducing their life expectancy by several years and, by the same token, increasing their care and service needs as adults.

Health Services as a Health Determinant

The health care system fulfils two major functions in our societies. First, it is responsible for making treatment and care available to people who are ill or injured, have an activity limitation or are in distress. The health care system offers people security and the guarantee that they will receive the best treatment and care according to recognized standards. *This is the most visible and sensitive part of the system* and the one that most often receives attention. It has an urgent nature because people's quality of life and even survival are at stake.

Second, the health and social services system has a responsibility in the area of prevention and health promotion (anti-smoking programs, accident prevention, environmental hazards, etc.), which is shared with other sectors, as well as in supporting persons who are vulnerable (persons with a disability, seniors losing their autonomy). Although less visible than the first responsibility of the health care system described above, it is just as essential. If, as a society, we chose to invest essentially in treatment and emergency, without considering prevention measures and support measures for those who are vulnerable, the pressure on specialized services would be such that we would have to invest many more resources in them than we do today.

This is best illustrated by the recurrent problem of emergency rooms which is being experienced in Québec today. It is known that the main cause of periodic backlogs is the increase in visits and stays among persons aged 75 and over. They accounted for 56% of additional visits recorded in 1994-1995 and 1998-1999. How can this problem be solved? In the short term – there is really no choice here – more resources must be invested in emergency rooms. In the medium term, based on existing evidence, we must find ways to prevent the most common causes of deterioration and preventable diseases, which are responsible for the increase in hospitalization needs. Also, promising experiments must be evaluated and research conducted to increase our knowledge in this regard. We must certainly improve basic services for seniors who are losing their autonomy, called "soft" services, and offer the most vulnerable persons solutions in their community and a continuity of care that both better responds to their needs and is less costly to the state and society. We must increase our ability to help seniors age in good health while participating in the life of their community and we must support their families.

This prevention-centred approach to managing the continuum of services could target diseases that result in disability or that are the cause of significant, recurrent demand for care (for example, cancer, diabetes, heart failure, asthma, chronic respiratory diseases, pneumonia and influenza), as shown by the cancer control program. If we do not follow this path, we are doomed to have to continue to invest more and more in emergency and specialized services. The result would be disastrous in the medium term both for public finances and for the quality of life of the persons involved.

Another example can be found in Québec's lung cancer mortality rate, which is the highest of all the provinces in Canada. The quality of treatment services, which are similar to neighbouring provinces, is not so much at issue here. Rather it is the fact that, until relatively recently, and for several decades, the smoking rate of Quebeckers was one of the highest in the world. Today, specialized "curative" services have to deal with the consequences.

These simple illustrations clearly show that we cannot work on treatment and care needs alone while ignoring prevention and support for people. For the sake of effectiveness and efficiency, we must act on both these levels. The emphasis that needs to be put on specialized services today must not make us lose sight of this obvious fact.

The performance of a health care system is measured against what can be achieved given the resources devoted to health. This was illustrated in a recent WHO report on trends and issues in world health. Thus, countries with comparable levels of resources achieve markedly different results.

In other words, according to the WHO analysis, countries that spend as much as others reach higher levels of health, response capability and equitable funding by using each of the four key functions of every health care sysem differently: stewardship, financing, service delivery and resource production. The definition of service delivery includes services and interventions in disease prevention, health promotion and protection, in the same way as it does patient care.

The performance of a health care system is therefore the product of its optimal capability to respond, the fairness of its financing and the health status of all population groups.

Issues Related to Health and the Health Care System in the 21st Century

The following are some of the major issues and challenges to emerge from the portrait of the health of Quebeckers:

- To reduce the preventable diseases that are on the increase and those for which Québec has an excess mortality rate (e.g., diseases related to smoking, diabetes, cardiovascular disease): to improve the physical and mental health of adults, especially men, who are more affected by these problems than women, or affected at a younger age.
- To improve the health of seniors, through actions aimed at cure or care, but just as much at prevention, and to promote healthy aging among Québec seniors.
- To invest more in meeting the needs of those who are living with a disability or reduced autonomy, and to support their families.
- To ensure that the conditions exist for the healthy development of children, from the very beginning of life.
- To reduce the differences in health status between persons from advantaged environments and those from disadvantaged environments or those who belong to more vulnerable groups in which a combination of factors are likely to be detrimental to their health and capacity to contribute to their community.
- To take more action, both in communities and through public policies, regarding the social and economic determinants of health status, which are the common denominator in a large proportion of the differences observed between groups in society in Québec and elsewhere.

Solutions to Address These Issues

The issues related to improving health are challenges that the Québec health care system must meet, regardless of the management mechanisms or the ways in which services are organized.

Thus, the orientations, policies and expectations expressed at the different levels of the system should encourage them to account not only for those activities aimed at ensuring that they offer accessible and high-quality services, but also, in the context of their specific missions, their contribution to addressing the issues related to the health of Quebeckers and the importance they attach to activities that have a potential influence on these issues.

Two, complementary categories of solutions can be used to address these issues:

1. Adapt the health care system

   Primary care: intensify the shift to ambulatory care and strengthen the basic services to better serve the public, prevent and decrease the pressure on specialized services and reduce periods of disability and suffering linked to a health problem.

   Specialized services: invest particularly in the development of advanced technologies that will reduce premature mortality, suffering and periods of disability resulting from health problems, and improve access to advanced services for populations located far from the major centers.

Orient actions of the health and social services system according to a policy on health and well-being and health improvement targets, encouraging the actors to intervene as close as possible to the source of health problems and to be accountable for their contribution in this regard.

2. Reduce excess mortality and excess morbidity as well as gaps between groups in preventable diseases by taking action upstream on basic issues through the promotion of the living conditions, living environments and lifestyles that are conducive to good health (lifestyle is conditioned by a social and economic environment and the public policies that govern and can only be dealt with through intersectoral co-operation).This reduction, targeted by the Policy on Health and Well-Being and Québec's Priorities in Public Health, requires two types of actions:

   - In the field of public policies that influence health, action aimed at:

     - bringing out the favourable and unfavourable impact of public policies on the health of the population (new policies and amendments) by providing the incentive for policy and legislative proposals to be submitted to the Conseil des ministres with an evaluation of the impact of these proposals on the health and well-being of the population (in the same way that environmental impact is considered);

     - developing orientations on health and well-being that concern the government as a whole, so as to guide intersectoral actions and orient actions taken with regard to health determinants by the health and social services network.

   - With regard to interventions with and in the communities, a deployment of services at the local and regional levels with the support of expertise and specialized services at the regional and national level so as to:

     - invest in health determinants very early in the life of members of the population (early childhood);

     - adopt the means to deal with the increased incidence of certain diseases (early intervention, health promotion, prevention) and reduce deaths and preventable diseases among adults, particularly men;

     - reduce the differences in health status between Québec population groups, particularly through interventions in vulnerable communities and groups;

     - establish measures and interventions to foster healthy aging;

     - take more action on emerging or re-emerging health problems;

     - adopt effective tools and indicators to anticipate the evolution of the health of the population, the groups therein and the factors that influence their health.

Other publications are available in the **documentation** section of the ministère de la Santé et des Services sociaux Web site at **www.msss.gouv.qc.ca**

- **La complémentarité du secteur privé dans la poursuite des objectifs fondamentaux du système public de santé au Québec: rapport du groupe de travail (rapport Arpin);**
- **La présence du privé dans la santé au Québec: état détaillé de la situation (rapport Arpin);**
- **Constats et recommandations sur les pistes à explorer: synthèse (rapport Arpin);**
- **Le financement des soins sociosanitaires (rapport Bédard);**
- **Le financement du système public de santé et de services sociaux du Québec (document d'information);**
- **Le système québécois de santé et de services sociaux (points de repères).**

Québec
Ministère de
la Santé et des
Services sociaux

www.msss.gouv.qc.ca

00-106-4A